#### **SEA ENVIRONMENTAL REPORT**

#### FOR THE

## DRAFT EDENDERRY LOCAL AREA PLAN 2023-2029

#### for: Offaly County Council

Áras an Chontae Charleville Road Tullamore County Offaly



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#### List of Abbreviations

AA Appropriate Assessment CAFE Cleaner Air for Europe

**CFRAM** Catchment Flood Risk Assessment and Management

**CORINE** Co-ORdinated Information on the Environment

**CSO** Central Statistics Office

**DAFM** Department of Agriculture, Food and Marine

**DCCAE** Department of Communication, Climate Action and Environment

**DCHG** Department of Culture, Heritage and the Gaeltacht

**DEHLG** Department of the Environment, Heritage and Local Government

**DHPLG** Department of Housing, Planning and Local Government

EIA Environmental Impact Assessment
EPA Environmental Protection Agency
EQS Environmental Quality Standard

**EU** European Union

GFC Gross Final Consumption
GSI Geological Survey of Ireland

NHA Natural Heritage Area

**NIAH** National Inventory of Architectural Heritage

NTA National Transport Authority

**OPW** Office of Public Works

**pNHA** proposed Natural Heritage Area

PAS Priority Action Substance
RAL Remedial Action List
RBD River Basin District

RBMP River Basin Management Plan
RMP Record of Monuments and Places

**RPA** Register of Protected Areas

**RSES** Regional Spatial and Economic Strategy

**SAC** Special Area of Conservation

SEA Strategic Environmental Assessment
SEO Strategic Environmental Objective
SI No. Statutory Instrument Number

SPA Special Protection AreaWHO World Health OrganisationWFD Water Framework Directive

#### **Glossary**

#### **Appropriate Assessment**

The obligation to undertake Appropriate Assessment (AA) derives from Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC. AA is a focused and detailed impact assessment of the implications of a strategic action (such as a plan or programme) or project, alone and in combination with other strategic actions and projects, on the integrity of a European Site in view of its conservation objectives.

#### **Biodiversity and Flora and Fauna**

Biodiversity is the variability among living organisms from all sources including inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species and of ecosystems' (United Nations Convention on Biological Diversity 1992).

Flora is all of the plants found in a given area.

Fauna is all of the animals found in a given area.

#### **Environmental Problems**

Annex I of Directive 2001/42/EC of the European Parliament and of the Council of Ministers, of 27<sup>th</sup> June 2001, on the assessment of the effects of certain Plans and programmes on the environment (the Strategic Environmental Assessment Directive) requires that information is provided on 'any existing environmental problems which are relevant to the plan or programme', thus, helping to ensure that the proposed strategic action does not make existing environmental problems worse.

Environmental problems arise where there is a conflict between current environmental conditions and ideal targets. If environmental problems are identified at the outset they can help focus attention on important issues and geographical areas where environmental effects of the plan or programme may be likely.

#### **Environmental Vectors**

Environmental vectors are environmental components, such as air, water or soil, through which contaminants or pollutants, which have the potential to cause harm, can be transported, coming into contact with human beings.

#### Mitigate

To make or become less severe or harsh.

#### **Mitigation Measures**

Mitigation measures are measures envisaged to prevent, reduce and, as fully as possible, offset any significant adverse impacts on the environment of implementing a human action, be it a plan, programme or project. Mitigation involves ameliorating significant negative effects. Where there are significant negative effects, consideration should be given in the first instance to preventing such effects or, where this is not possible, to lessening or offsetting those effects. Mitigation measures can be roughly divided into those that: avoid effects; reduce the magnitude or extent, probability and/or severity of effects; repair effects after they have occurred; and compensate for effects, balancing out negative impacts with other positive ones.

In the context of Article 6 of the Habitats Directive, mitigation measures are clearly distinguished from compensatory measures. Compensatory measures are intended to offset the negative effects of the plan or project so that the overall ecological coherence of the Natura 2000 Network is maintained.

#### **Natural Heritage**

The Heritage Act (1995) defines natural heritage as including flora, fauna, wildlife habitats, landscapes, seascapes, wrecks, geology, inland waterways, heritage gardens and parks.

#### **Protected Structure**

Protected Structure is the term used in the Planning and Development Act 2000 (as amended) and associated Regulations (as amended) to define a structure included by a planning authority in its Record of Protected Structures. Such a structure shall not be altered or demolished in whole or part without obtaining planning permission or confirmation from the planning authority that the part of the structure to be altered is not protected.

#### **Recorded Monument**

A monument included in the list and marked on the map which comprises the Record of Monuments and Places that is set out county by county under Section 12 of the National Monuments (Amendment) Act, 1994 by the Archaeological Survey of Ireland. The definition includes Zones of Archaeological Potential in towns and all other monuments of archaeological interest which have so far been identified. Any works at or in relation to a recorded monument requires two months' notice to the Department of Culture, Heritage and the Gaeltacht under Section 12 of the National Monuments (Amendment) Act, 1994.

#### **Scoping**

Scoping is the process of determining what issues are to be addressed, and setting out a methodology in which to address them in a structured manner appropriate to the plan or programme. Scoping is carried out in consultation with appropriate environmental authorities.

#### Strategic Environmental Assessment (SEA)

Strategic Environmental Assessment (SEA) is the formal, systematic evaluation of the likely significant environmental effects of implementing a plan or programme before a decision is made to adopt it.

#### Strategic Environmental Objective (SEO)

Strategic Environmental Objectives (SEOs) are methodological measures developed from policies which generally govern environmental protection objectives established at International, Community or Member State level and are used as standards against which the provisions of the Plan and the alternatives can be evaluated in order to help identify which provisions would be likely to result in significant environmental effects and where such effects would be likely to occur, if - in the case of adverse effects - unmitigated.

#### Section 1 SEA: Introduction and Benefits

#### 1.1 Introduction

This is the Strategic Environmental Assessment (SEA) Environmental Report for the Edenderry Local Area Plan 2023-2029. It has been undertaken by CAAS Ltd. on behalf of Offaly County Council. The purpose of this report is to provide a clear understanding of the likely environmental consequences of decisions regarding the adoption and implementation of the Plan.

Environmental assessment is a procedure that ensures that the environmental implications of decisions are taken into account before such decisions are made. Environmental Impact Assessment, or EIA, is generally used for describing the process of environmental assessment for individual projects, while Strategic Environmental Assessment or SEA is the term which has been given to the environmental assessment of plans and programmes, which help determine the nature and location of individual projects taking place. SEA is a systematic process of predicting and evaluating the likely significant environmental effects of implementing a proposed plan or programme, in order to ensure that these effects are adequately addressed at the earliest appropriate stages of decision-making in tandem with economic, social and other considerations.

The SEA has been undertaken in order to comply with European SEA Directive<sup>1</sup>, which introduced the requirement that SEA be carried out on plans and programmes that are prepared for a number of sectors, including land use planning.

## 1.2 Implications for the Planning Authority

SFA identifies likely significant the environmental effects of implementing the Plan. The findings of the SEA are expressed in this Environmental Report, which accompanies the Draft Plan on public display and identifies environmental considerations integrated into the Plan and how alternatives for the Plan were considered. This report may be updated in order to take account of recommendations contained in submissions and/or in order to take account of any changes which are made to the Draft Plan on foot of submissions.

The planning authority must take into account the findings of this report and other related SEA output during their consideration of the Draft Plan and before it is adopted.

When the Draft Plan is finalised, an SEA Statement must be prepared which will summarise, inter alia, how environmental considerations have been integrated into the Plan.

## 1.3 Why SEA? The Benefits

SEA is the planning authority's and the public's guide to what are generally the best areas for development in the town.

SEA enables the planning authority to direct development towards robust, well-serviced and connected areas in the town – thereby facilitating the general avoidance of incompatible development in the most sensitive, least well-serviced and least well-connected areas, in the town and beyond.

SEA provides greater certainty to the public and to developers. Plans are more likely to be adopted without delays or challenges and planning applications are more likely to be granted permission. Environmental mitigation is more likely to cost less.

<sup>&</sup>lt;sup>1</sup> Directive 2001/42/EC of the European Parliament and of the Council of Ministers, of 27<sup>th</sup> June 2001, on the assessment of the effects of certain plans and programmes on the environment, transposed into Irish Law through the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (SI No. 435 of 2004), as amended by the European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011 (SI No. 200 of 2011), and the Planning and Development (SEA) Regulations 2004 (SI No. 436 of 2004), as amended by the Planning and Development (SEA) (Amendment) Regulations 2011 (SI No. 201 of 2011).

The Plan directs incompatible development away from the most sensitive areas in the town and focuses on directing compact, sustainable development within the existing envelope of the Plan area. Development of these generally more robust, well-serviced and well-connected areas of the town will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation.

Compact development can be accompanied by placemaking initiatives to enable the town to become a more desirable place to live – so that it maintains populations and services.

Compatible sustainable development in the town's sensitive areas is also provided for, subject to various requirements relating to environmental protection and management being met.

#### Section 2 The Draft Plan

#### 2.1 Introduction

Offaly County Council has prepared a new Draft Local Area Plan (LAP) for Edenderry under the Planning and Development Act 2000 (as amended). The Plan sets out an overall strategy for the proper planning and sustainable development over the years 2023-2029.

LAPs are required to be consistent with the policies and objectives of the County Development Plan and its Core Strategy, as well as the National Planning Framework and Regional Spatial Economic Strategies.

The LAP should be read in conjunction with the Offaly County Development Plan 2021-2027, which sets out the overarching development strategy for the County. Where conflicting objectives arise between the County Development Plan and the LAP, the objectives of the relevant County Development Plan shall take precedence.

#### 2.2 Content of the Plan

This LAP sets out an overall strategy for the proper planning and sustainable development of Edenderry in the context of Project Ireland 2040, the National Planning Framework, the Regional Spatial and Economic Strategy for the Eastern and Midland Region and the Offaly County Development Plan. It is informed by Ministerial Guidelines issued pursuant to Section 28 of the Act together with EU requirements regarding SEA and AA.

The general development management standards, zoning matrix/descriptions and policies and objectives in the County Development Plan applicable to settlements (including provisions relating to environmental protection and management) can be applied to the LAP boundary area, while additional policies and objectives that are specific to Edenderry are included in the LAP.

LAP provisions are set out under twelve chapters and an appendix as follow:

- Chapter 1 Introduction and Context
- Chapter 2 Economic Development
- Chapter 3 Town Centre and Regeneration

- Chapter 4 Built Heritage
- Chapter 5 Residential
- Chapter 6 Biodiversity and Green Infrastructure
- Chapter 7 Community
- Chapter 8 Climate Action
- Chapter 9 Critical Infrastructure
- Chapter 10 Planning and Infrastructural Assessment
- Chapter 11 Land Use Zoning Objectives
- Chapter 12 Implementation and Monitoring

## 2.3 Strategic Vision and Aims

The LAP is underpinned by a strategic vision statement which is intended to guide the future growth of Edenderry in a sustainable manner, in a way that reflects the inherent character of the area and identifies the potential of utilising its existing assets as the base for improving the quality of life and resilience of both the present and future residents of the town.

The following strategic aims in conjunction with each other will assist in delivering the strategic vision for Edenderry.

#### Strategic Aim 1: Economic Development

To successfully fulfil Edenderry's role as a self-sustaining town by embracing the transition to a low carbon and climate resilient model of development while seeking to utilise and invest in the town's existing economic, social and environmental assets to generate sustainable economic development and job creation, thereby enhancing its status as the main business, service, employment, social, cultural, tourism and recreational hub for everyone in east Offaly and ensuring it is an attractive place to live, work and visit.

#### Strategic Aim 2: Town Centre and Regeneration

To sensitively and sustainably enhance the historic town centre through the provision of healthy place-making. To facilitate a competitive and healthy retail environment and to support the future vitality, diversity and viability of Edenderry. These aims will improve the attractiveness and functionality of Edenderry as a place in which to live, work and visit.

#### • Strategic Aim 3: Built Heritage

To protect, conserve and manage Edenderry's buildings, areas, structures, sites and features of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest, by promoting the understanding, enhancement and appropriate

development of these assets in order to instigate regeneration of the town.

#### • Strategic Aim 4: Residential

Deliver high quality housing in terms of design, scale, mix, tenure, sequence and density to reasonable match the requirements of the different categories of households which shall be constructed on the principles of universal design, life-long adaptability and energy efficiency, and developed in a manner which promotes compact growth and healthy placemaking and is in line with the Core Strategy in the County Development Plan.

#### Strategic Aim 5: Biodiversity and Green Infrastructure

Protect and enhance Edenderry's natural assets of clean water, biodiversity, landscape, green infrastructure, natural heritage and agricultural land, while maintaining ecosystem services and improving resilience to climate change.

#### • Strategic Aim 6: Community

Promote Edenderry as a town where people can live and work, with access to a range of community facilities and events that are vital for social inclusion and quality of life for all.

#### Strategic Aim 7: Climate Action

Enhance climate adaptation and mitigation, and accelerate a transition to a low carbon, climate resilient and environmentally sustainable economy in Edenderry.

#### • Strategic Aim 8: Critical Infrastructure

Promote facilitate the timely provision of infrastructure and utilities that will support sustainable socioeconomic growth and protect the quality of the environment of the town in a low carbon manner.

#### Strategic Aim 9: Planning and Infrastructural Assessment

To phase new development to ensure that it occurs in a sequential and efficient manner and in tandem with the delivery of supporting physical and social infrastructure.

#### Strategic Aim 10: Land Use Zoning Objectives

To adhere to the land use zoning objectives contained in this Plan in the interests of orderly development and eliminating potential conflicts between incompatible land uses.

#### Strategic Aim 11: Implementation and Monitoring

To implement in conjunction with key stakeholders, the objectives of this Local Area Plan, with a particular focus on the key strategic objectives, and to monitor same.

# 2.4 Strategic work undertaken by the Council to ensure contribution towards environmental protection and sustainable development

Far in advance of the placing of the Draft Plan on public display, Offaly County Council undertook various works in order to inform the preparation of the Plan.

The findings of this strategic work have been integrated into the Plan and will contribute towards both environmental protection and management and sustainable development.

The following Edenderry specific non-statutory plans and studies were taken into account in the preparation of the LAP:

- Edenderry Local Transport Plan; and
- Blundell Masterplan.

The undertaking of this SEA process was part of this strategic work and contributed towards the integration of environmental considerations into individual Plan provisions as detailed in Section 9 of this report.

## 2.5 Relationship with other relevant Plans and Programmes

It is acknowledged that many of the major issues affecting Edenderry's development are contingent on national policy and government funding.

The Plan sits within a hierarchy of statutory documents setting out public policy for, among other things, land use planning, infrastructure, sustainable development, tourism, environmental protection and environmental management. The Plan must comply with relevant higher-level strategic actions and may, in turn, guide lower level strategic actions. These documents include plans and programmes such as those detailed in

Appendix I² (see also, Section 4 "Environmental Baseline", Section 5 "Strategic Environmental Objectives", Section 6 "Description of Alternatives" and Section 9 "Mitigation Measures"). These documents have been subject to their own environmental assessment processes, as relevant.

The National Planning Framework (NPF) sets out Ireland's planning policy direction up to 2040. The NPF is to be implemented through Regional Spatial and Economic Strategies (RSESs) and lower tier Development Plans and Local Area Plans. The RSES for the Eastern and Midlands Region sets out objectives for land use planning, tourism, infrastructure, sustainable development, environmental protection and environmental management that have been subject to environmental assessment and must be implemented through the Offaly County Development Plan 2021-2027, which sets out the overarching development strategy for the County, and the Local Area Plan.

In order to be realised, projects included in the Local Area Plan (in a similar way to other projects from any other sector) will have to comply, as relevant, with various legislation, policies, plans and programmes (including requirements for lower-tier **Appropriate** Assessment, Environmental **Impact** Assessment and other licencing requirements as appropriate) that form the statutory consent-granting decision-making and framework.

<sup>&</sup>lt;sup>2</sup> Appendix I is not intended to be a full and comprehensive review of EU Directives, the transposing regulations or the regulatory framework for environmental protection and management. The information is not exhaustive and it is recommended to consult the Directive, Regulation, Plan or Programme to become familiar with the full details of each.

#### Section 3 SEA Methodology

## 3.1 Introduction to the Iterative Approach

Figure 3.1 provides an overview of the integrated Plan preparation, SEA, Appropriate Assessment (AA) and Strategic Flood Risk Assessment (SFRA) processes. preparation of the Plan, SEA, AA and SFRA have taken place concurrently and the findings of the SEA, AA and SFRA have informed the Plan. The process is currently at a stage where the findings of this report will be placed on public display as part of the required statutory public consultations. AA and SFRA documents will also accompany the Plan on public display. Submissions made on the Plan and associated documents, including SEA and AA documents,

will be responded to and updates made to the documents where relevant.

Submissions made on the Plan will be responded to and the Plan will be updated as appropriate. When the Plan is finalised, the SEA, AA and SFRA documents will be finalised. Final documents will include an SEA Statement, which will include information on how environmental considerations were integrated into the Plan, and an AA Conclusion Statement. The Plan will be implemented and environmental monitoring – as well as planning and project development and associated environmental assessments and administrative consent of projects – will be undertaken.

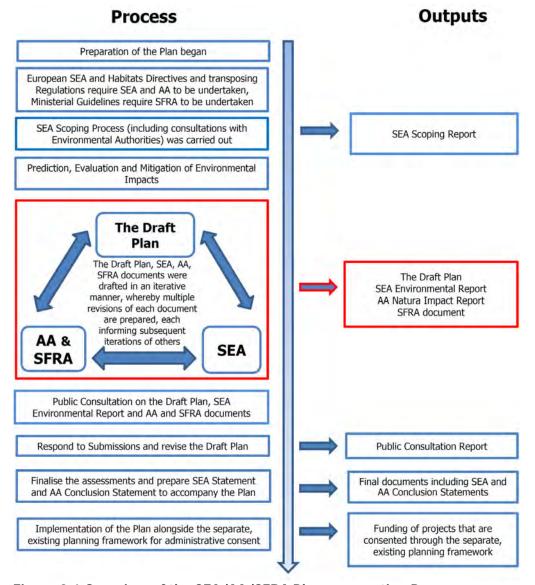


Figure 3.1 Overview of the SEA/AA/SFRA Plan-preparation Processes

## 3.2 Appropriate Assessment and Integrated Biodiversity Impact Assessment

#### 3.2.1 Appropriate Assessment

Appropriate Assessment (AA) Screening and Stage 2 AA have been undertaken alongside the Plan. The requirement for AA is provided under the EU Habitats Directive (Directive 1992/43/EEC).

The conclusion of the AA is that the Plan will not affect the integrity of the European Sites, alone or in combination with other plans or projects.<sup>3</sup>

The preparation of the Plan, SEA and AA has taken place concurrently and the findings of the AA have informed the SEA.

#### 3.2.2 Integrated Biodiversity Impact Assessment

Many elements of Integrated Biodiversity Impact Assessment as detailed in the EPA's (2013) Practitioner's Manual have been aligned with in the undertaking of the SEA for the Plan. These include:

#### Scoping

- Biodiversity-relevant issues were identified for consideration at scoping stage and these are now detailed in Section 4.
- Reference to a zone of influence is provided at Section 4.

#### **Baseline**

- Biodiversity data sources relevant for this local level assessment have been identified and datasets collated/gathered.
- The biodiversity baseline addresses designated sites and other habitats and species of ecological value.
- AA information has been incorporated into the SEA baseline.

<sup>3</sup> Except as provided for in Article 6(4) of the Habitats Directive, viz. There must be:

(b) imperative reasons of overriding public interest for the plan to proceed; and

#### **Alternatives**

 Impacts upon biodiversity are considered under each of the alternatives and potential conflicts can be mitigated.

#### Impact assessment

 Effects on biodiversity are identified and assessed and the AA considers the interrelationship between biodiversity and potential effects on European Sites.

#### Mitigation and monitoring

- Taking into account all measures contained within the Plan, all the proposed mitigation measures deriving from the various processes were generally consistent and compatible.
- Indicators and associated targets have been included in SEA for monitoring European Sites.

#### Reporting

- This SEA ER addresses all biodiversity-related considerations relevant for this level of assessment.
- This SEA ER contains all biodiversity-relevant information, data, figures and maps relevant for this level of assessment.
- This SEA ER has been informed by the AA findings.

#### Communication and consultation

- Submissions received have been taken on board.
- The preparation of the Plan, SEA and AA have taken place concurrently and the findings of the AA have informed the SEA.

#### 3.3 Strategic Flood Risk Assessment

A Strategic Flood Risk Assessment (SFRA) document accompanies this Environmental Report and the Draft Plan. Requirements in relation to SFRA are provided under 'The Planning System and Flood Risk Guidelines Planning Management for Authorities' (Department of Environment and Office of Public Works, 2009) and associated Department of the Environment, Community and Local Government Circular PL2/2014. Flood and drainage related provisions have been integrated into the LAP.

Flood risk management and drainage provisions are already in force through the County Development Plan and related provisions have been integrated into the LAP. In addition, land use zoning contained within the Draft Plan has been informed by the SFRA process and associated delineation of flood risk zones.

<sup>(</sup>a) no alternative solution available,

<sup>(</sup>c) adequate compensatory measures in place.

#### 3.4 Scoping

The scope of environmental issues to be dealt with by the SEA together with the level of detail to which they are addressed was broadly decided upon taking into account the collection of environmental baseline data and input from environmental authorities. Scoping allowed the SEA to become focused upon key issues relevant to the environmental components that are specified under the SEA Directive<sup>4</sup>.

All relevant environmental authorities identified under the SEA Regulations as amended, were sent SEA scoping notices by the Council indicating that submissions or observations in relation to the scope and level of detail of the information to be included in the environmental report could be made to the Council<sup>5</sup>.

As the Plan is not likely to have significant effects on the environment in another Member State, transboundary consultations as provided for by Article 7 of the SEA Directive were not undertaken.

Submissions made by the environmental authorities influenced the scope of the assessment undertaken, the findings of which are included in this report.

#### 3.5 Alternatives

The SEA Directive requires that reasonable alternatives (taking into account the objectives and the geographical scope of the plan or programme) are identified, described and evaluated for their likely significant effects on the environment. In accordance with this requirement, alternatives for the Plan are identified and assessed in Sections 6 and 7.

## 3.6 Environmental Report

This SEA Environmental Report predicts and evaluates the likely environmental effects of implementing the Plan and relevant alternatives. The Environmental Report provides the Council, stakeholders and the public with a clear understanding of the likely environmental consequences of the Plan.

Mitigation measures to prevent or reduce significant adverse effects posed by the Plan are identified in Section 9 - these have been integrated into the Plan.

This Environmental Report will be updated in order to take account of recommendations contained in submissions and in order to take account of changes that are made to the original, Draft Plan that is being placed on public display. Changes to the Draft Plan will be examined for the need to undertake SEA and AA.

The Environmental Report is required to contain the information specified in Schedule 2B of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004), as amended (see Table 3.1).

No significant difficulties have been encountered during the undertaking of the assessment to date.

#### 3.7 SEA Statement

On finalisation of the Plan, an SEA Statement will be prepared that will include information on:

- How environmental considerations have been integrated into the Plan, highlighting the main changes to the Plan that resulted from the SEA process;
- How the SEA Environmental Report and consultations have been taken into account, summarising the key issues raised in consultations and in the Environmental Report indicating what action was taken in response;
- The reasons for choosing the Plan in the light of the other alternatives, identifying the other alternatives considered, commenting on their potential effects and explaining why the Plan as adopted was selected; and
- The measures decided upon to monitor the significant environmental effects of implementing of the Plan.

<sup>&</sup>lt;sup>4</sup> These components comprise biodiversity, fauna, flora, population, human health, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors.

<sup>&</sup>lt;sup>5</sup> The following authorities were notified: Environmental Protection Agency; Department of Environment, Climate and Communications; Department of Agriculture, Food and the Marine; Department of Housing, Local Government and Heritage; Meath Council; Westmeath County Council; Roscommon County Council; Galway County Council; Tipperary County Council; Laois County Council; and Kildare County Council.

Table 3.1 Checklist of Information included in this Environmental Report

Information Required to be included in the Environmental Report	Corresponding Section of this Report
(A) Outline of the contents and main objectives of the plan or programme, and of its relationship with other relevant plans and programmes	Sections 2, 5 and 8
(B) Description of relevant aspects of the current state of the environment and the evolution of that environment without implementation of the plan or programme	Section 4
(C) Description of the environmental characteristics of areas likely to be significantly affected	Sections 4, 7 and 8
(D) Identification of any existing environmental problems which are relevant to the plan or programme, particularly those relating to European protected sites	Section 4
(E) List of environmental protection objectives, established at international, EU or National level, which are relevant to the plan or programme and describe how those objectives and any environmental considerations have been taken into account when preparing the Plan	Sections 5, 7, 8, 9 and Appendix I
(F) Describe the likely significant effects on the environment	Sections 7 and 8
(G) Describe any measures envisaged to prevent, reduce and as fully as possible offset any significant adverse environmental effects of implementing the plan or programme	Section 9
(H) Give an outline of the reasons for selecting the alternatives considered, and a description of how the assessment was undertaken (including any difficulties)	Sections 3, 6, 7 and 8
(I) A description of proposed monitoring measures	Section 10
(J) A non-technical summary of the above information	Appendix II Non- Technical Summary
(K) Interrelationships between each environmental topic	Addressed as it arises within each Section

#### Section 4 Environmental Baseline

#### 4.1 Introduction

Reflecting the specifications in the SEA Directive, the relevant aspects of the current state of the environment for the following environmental components are described in this section: biodiversity and flora and fauna, population and human health, soil, water, air and climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors.

This description includes information that is relevant to lower tier planning, environmental assessments and decision-making<sup>6</sup>.

## 4.2 National Reporting on the Environment

The EPA's "Ireland's Environment – An Assessment 2020" report provides an integrated assessment of the overall quality of Ireland's environment, the pressures being placed on it and the societal responses to current and emerging environmental issues. This report has informed various parts of the environmental baseline provided below. The key environmental challenges or messages identified by the report are:

#### **Environmental Policy Position**

A national policy position for Ireland's Environment.

#### **Full implementation**

Full implementation of existing environmental legislation and a review of the governance around the coordination on environmental protection across public bodies.

#### Health and Wellbeing

Protecting the Environment is an Investment in Our Health and Wellbeing.

#### Climate

Systemic change is required for Ireland to become the climate-neutral and climate resilient society and economy that it aspires to be.

#### Air Quality

Adoption of measures to meet the World Health Organization air quality guideline values should be the target to aim for in the Clean Air Strategy.

#### **Nature**

Safeguard nature and wild places as a national priority and to leave a legacy for future generations.

#### **Water Quality**

Improve the water environment and tackle water pollution locally at a water catchment level.

#### Marine

Reduce the human-induced pressures on the marine environment.

#### **Clean Energy**

Ireland needs to move rapidly away from the extensive use of fossil fuels to the use of clean energy systems.

#### **Environmentally Sustainable Agriculture**

An agriculture and food sector that demonstrates validated performance around producing food with a low environmental footprint.

#### **Water Services**

Drinking water and wastewater infrastructure must meet the needs of our society.

#### Circular Economy

Move to a less wasteful and circular economy where the priority is waste prevention, reuse, repair and recycling.

#### Land Use

Promote integrated land-mapping approaches to support decision-making on sustainable land use.

The report highlights that high-quality green and blue spaces are not just for nature but are for peoples' health and wellbeing, particularly in the context of an increasingly urban society and increasing settlement densities.

## 4.3 Sustainable Development Goals

Implementation of the Plan will contribute towards efforts to achieve a number of the 17 Sustainable Development Goals of the 2030 Agenda for Sustainable Development, which were adopted by world leaders in 2015 at a United Nations Summit and came into force in 2016. These Goals include:

 Goal 3. Ensure healthy lives and promote wellbeing for all at all ages.

Obte that Article 5 of the SEA Directive, in accordance with the established European principle of subsidiarity, requires that the Environmental Report includes the information that may reasonably be required taking into account, inter alia, the extent to which certain matters are more appropriately assessed at different levels in that process in order to avoid duplication of the assessment.

- Goal 6. Ensure availability and sustainable management of water and sanitation for all.
- Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all.
- Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
- Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
- Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable.
- Goal 12. Ensure sustainable consumption and production patterns.
- Goal 13. Take urgent action to combat climate change and its impacts.
- Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

## 4.4 Likely Evolution of the Environment in the Absence of a new Plan

In the absence of a new Local Area Plan, the framework for development across the Plan area would be provided by the County Development Plan and other related documents. There would be no Local Area Plan to provide additional detail beyond that provided already through the existing planning framework as how to achieve sustainable development and environmental protection and management in the town.

As a result, there would be a decreased likelihood in the extent, magnitude and frequency of the positive environmental effects identified by this assessment occurring, including:

- Contribution towards protection of ecology (including designated sites, ecological connectivity. habitats) facilitating by development of lands (including those within and adjacent to the Plan area) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the Plan area and beyond.
- Contribution towards the maintenance of existing green infrastructure and associated ecosystem services, listed species, ecological connectivity and non-designated habitats.
- Contribution towards protection and/or maintenance of biodiversity and flora and fauna by contributing towards the protection of natural capital including the environmental vectors of air, water and soil. Biodiversity and flora and fauna includes biodiversity in

- designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species (including birds and bats), listed/protected species, ecological connectivity and non-designated habitats (including terrestrial and aquatic habitats), and disturbance to biodiversity and flora and fauna including terrestrial and aquatic biodiversity and flora and fauna.
- Sustains existing sustainable rural management practices – and the communities who support them – to ensure the continuation of longestablished managed landscapes and the flora and fauna that they contain.
- Promotion of economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management.
- Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands (including those within and adjacent to the Plan area) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere in the Plan area and beyond
- Contribution towards the protection of human health by facilitating development of lands (including those within and adjacent to the Plan area) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the Plan area and beyond.
- Contributes towards protection of human health as a result of contributing towards the protection of natural capital including environmental vectors, including air and water.
- Contribution towards the protection of soils (including those used for agriculture) and designated sites of geological heritage by facilitating development of lands (including those within and adjacent to the Plan area) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the Plan area and beyond.
- Contribution towards the protection of the environment from contamination the highest standards of remediation, and where appropriate to consultations with the EPA and other relevant bodies, will be required to resolve any instances of environmental pollution created by contaminated land.
- Contribution towards the protection of water by facilitating development of lands (including those within and adjacent to the Plan area) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the Plan area and beyond.
- Contributions towards the protection of water resources including the status of surface and groundwaters and water-based designations.
- Contribution towards flood risk management and appropriate drainage.

- Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands (including those within and adjacent to the Plan area) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere in the Plan area and beyond.
- Contribution towards compliance with national and regional water services and waste management policies.
- Contribution towards increase in renewable energy use by facilitating renewable energy and electricity transmission infrastructure developments.
- Contribution towards limits in increases in energy demand from the transport sector by facilitating sustainable compact growth.
- Contribution towards reductions in average energy consumption per capita including promoting energy efficient buildings, retrofitting, smart buildings, cities and grids.
- Contribution towards climate mitigation and adaptation by facilitating compact development of lands (including those within and adjacent to the Plan area) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere in the Plan area and beyond.
- In combination with other plans, programmes etc., contribution towards the objectives of the wide policy framework relating to climate mitigation and adaptation, and associated contribution towards maintaining and improving air quality and managing noise levels, including through measures relating to:
  - Sustainable compact growth;
  - Sustainable mobility, including walking, cycling and public transport;
  - Drainage, flood risk management and resilience;
  - Sectors including agriculture, residential heating and infrastructure;
- Sustainable infrastructure design solutions including energy efficient buildings; green infrastructure).
- Contributes towards protection of cultural heritage elsewhere by facilitating development within the Plan area.
- Contributes towards protection of cultural heritage within the Plan area by facilitating brownfield development and regeneration.
- Contributes towards protection of wider landscape and landscape designations by facilitating development within the Plan area.

Furthermore, and as a result, there would be an increased likelihood in the extent, magnitude and frequency of the adverse environmental effects identified by this assessment occurring, including:

- Arising from both construction and operation of development and associated infrastructure:
  - Loss of/damage to biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species, listed species, ecological connectivity and non-

- designated habitats; and disturbance to biodiversity and flora and fauna;
- Habitat loss, fragmentation and deterioration, including patch size and edge effects; and
- o Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species such as birds (e.g. swifts) and bats.
- Potential adverse effects arising from flood events.
- Potential interactions if effects arising from environmental vectors.
- Potential adverse effects on the hydrogeological and ecological function of the soil resource, including as a result of development on contaminated lands.
- Potential for riverbank erosion.
- Potential adverse effects upon the status of water bodies and entries to the WFD Register of Protected Areas (ecological and human value), arising from changes in quality, flow and/or morphology.
- Increase in flood risk and associated effects associated with flood events.
- Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity ensures the mitigation of potential conflicts).
- Failure to adequately treat surface water run-off that is discharged to water bodies (water services infrastructure and capacity ensures the mitigation of potential conflicts).
- Failure to comply with drinking water regulations and serve new development with adequate drinking water (water services infrastructure and capacity ensures the mitigation of potential conflicts).
- Increases in waste levels.
- Potential impacts upon public assets and infrastructure.
- Interactions between agricultural waste and soil, water, biodiversity and human health – including as a result of emissions of ammonia from agricultural activities (e.g. manure handling, storage and spreading) and the production of secondary inorganic particulate matter.
- Potential conflict between development under the Plan and aiming to reduce carbon emissions in line with local, national and European environmental objectives.
- Potential conflicts between transport emissions, including those from cars, and air quality.
- Potential conflicts between increased frequency of noise emissions and protection of sensitive receptors.
- Potential conflicts with climate adaptation measures including those relating to flood risk management.
- Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities.
- Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape.

## 4.5 Natural Capital and Ecosystem Services<sup>7</sup>

Natural capital comprises renewable and non-renewable resources (e.g. plants, animals, air, water, soils, minerals) that combine to yield a flow of ecosystem services that provide benefits to people. These benefits can include clean air and water, a stable climate, protection from floods, food, resources for fuel, building materials, clothes and medicines, recreation. Managing natural capital so that it can continue to deliver the ecosystem services that provide these benefits is important in order to ensure sustainable development. Unmanaged natural capital risks the continued degradation and depletion of these assets, and in turn, of their capacity to provide the economy and society with the ecosystem benefits that they depend on. These services also regulate climate, regulate water flows (e.g. through wetlands and forests), sequester and store carbon in peatlands and improve soil quality for crops.

In recognition of the need to manage natural capital, provisions have been integrated into the Local Area Plan and the associated highertier Offaly County Development Plan 2021-2027 that will contribute towards management of air quality, noise pollution, light pollution, water quality and integrated catchment management.

Ecosystems are multifunctional communities of living organisms interacting with each other and their environment. Ecosystems provide a series of services for human well-being directly (ecosystem services) either indirectly contributing towards human wellbeing. There are four main types; provisioning, regulating, supporting cultural services. Provisioning services are the products obtained from ecosystems such as food, fresh water, wood, fibre, genetic resources and medicines. Regulating services are defined as the benefits obtained from the regulation of ecosystem processes such as climate regulation, natural hazard regulation, water purification and waste management, pollination or pest control. Support services highlight the importance of ecosystems to provide habitat for migratory species and to maintain the viability of gene-pools. Cultural

<sup>7</sup> This section includes content taken from the Eastern and Midlands Regional Spatial and Economic Strategy (Eastern and services include non-material benefits that people obtain from ecosystems such as spiritual enrichment, intellectual development, recreation and aesthetic values<sup>8</sup>.

In preparing the Plan and developing policy objectives, the Council have followed these ecosystem services approach principles:

- Consideration of natural systems by using knowledge of interactions in nature and how ecosystems function (including at Plan Chapter 6 "Biodiversity and Green Infrastructure").
- b) Taking into account of the services that ecosystems provide including those that underpin social and economic well-being, such as flood and climate regulation (including at Plan Chapter 8 "Climate Action"), resources for food, fibre or fuel (including at Chapters 6 "Biodiversity and Green Infrastructure" and 9 "Critical Infrastructure"), or for recreation, culture and quality of life (including at Chapters 3 "Town Centre and Regeneration" and 4 "Built Heritage").
- c) Involving people those who benefit from the ecosystem services and those managing them need to be involved in decisions that affect them (public consultation has informed the preparation of the Draft Plan which may be further refined before adoption, taking into account any submissions/observations made on the Draft Plan during public display).

The following natural capital and ecosystem services issues are relevant to this SEA and have been taken into account in the provisions of the Local Area Plan and the associated higher-tier Offaly County Development Plan 2021-2027:

- Pollination;
- Air quality;
- Noise pollution;
- Light pollution;
- Water quality and integrated catchment management including interactions with soil;
- Soil and vegetation carbon, which helps to regulate greenhouse gas emissions;
- Soil/geological storage of water, contributing towards flood control;
- Land supporting food production; and
- Natural resources supporting energy production and recreation.

## 4.6 Biodiversity and Flora and Fauna

#### 4.6.1 Overview

Information on biodiversity and flora and fauna which is relevant to project planning and development and associated environmental

Midlands Regional Assembly, 2019)

<sup>&</sup>lt;sup>8</sup> https://biodiversity.europa.eu/topics/ecosystem-services

assessment and administrative consent of projects includes available information on designated ecological sites and protected species, ecological connectivity (including stepping stones and corridors) and non-designated habitats.

Key ecological sensitivities within and surrounding the Plan area include:

- The Grand Canal proposed Natural Heritage Area, partially located within and downstream of the Plan area:
- Aquatic and riverine ecology associated with the River Boyne, including its tributaries and riparian buffer zones, and the Grand Canal<sup>9</sup>;
- The Long Derries Special Area of Conservation and proposed Natural Heritage Area, located c.2.5 km to the south-east of the Plan area;
- Black Castle Bog Natural Heritage Area, located c.3 km north-west of the Plan area, and Carbury Bog Natural Heritage Area, located c.4 km to the north-east of the Plan area;
- The town's swift (urban bird species of conservation concern) population, which is a significant biodiversity asset; and
- Various trees<sup>10</sup>, woodlands, parks, gardens, hedgerows and lands used for agriculture within and surrounding the Plan area, providing habitats for flora and fauna and facilitating linkages and corridors to the surrounding countryside for the wildlife.

The following information is relevant to ecological networks and connectivity and non-designated habitats:

- CORINE land cover mapping (including areas likely to contain a habitat listed in Annex 1 of the Habitats Directive)<sup>11</sup>;
- Watercourses, wetlands and peatlands;
- Other relevant County Development Plans designations;
- The EPA's Framework National Ecological Network for Ireland<sup>12</sup>; and

<sup>9</sup> Waterways Ireland (2014): *Ecological Survey of the Edenderry Branch of the Grand Canal.* 

 Other sites of high biodiversity value or ecological importance as identified by, for example, the Department of Agriculture, Food and the Marine (badger sets), relevant datasets from the National Biodiversity Data Centre and BirdWatch Ireland's 'Important Bird Areas' (Crowe et al., 2009).

Ecological important networks are connecting areas of local biodiversity with each other and with nearby designated sites so as to prevent islands of habitat from being isolated entities. They are composed of linear features, such as treelines, hedgerows and rivers/streams, which provide corridors or stepping stones for wildlife species moving within their normal range. They are important for the migration, dispersal and genetic exchange of species of flora and fauna particularly for mammals, especially for bats and small birds and facilitate linkages both between and within designated ecological non-designated surrounding the countryside and urban areas.

Article 10 of the Habitats Directive recognises the importance of ecological networks as corridors and stepping stones for wildlife, including for migration, dispersal and genetic exchange of species of flora and fauna. The Directive requires that ecological connectivity and areas of ecological value outside the Natura 2000 network of designated ecological sites are maintained.

Man-made habitats within the Plan area can also include important biodiversity features. Gardens provide habitats for a range of wildlife including various bird species, invertebrates such as bees and butterflies and mammals such as hedgehogs, mice, rats and foxes. These species move around between gardens using hedgerows and vegetated areas. These urban green spaces are of importance as they form part of a network of green spaces across the Plan area including gardens, parks, graveyards, amenity walks, old railway lines and patches of woodland and scrub within which animals and plants continue to thrive.

Ecological islands or areas of habitat that are not connected to surrounding ecologically valuable habitats can also be important.

The zone of influence of the Plan beyond the Plan area with respect to impacts upon ecology via surface waters – including

<sup>&</sup>lt;sup>10</sup> Tree Preservation Orders (TPOs) are a planning mechanism whereby individual trees or groups of trees can be identified as important and protected. There are seven TPOs designated within Edenderry as identified in the Offaly County Development Plan 2021-2027.

<sup>&</sup>lt;sup>11</sup> The CORINE land cover mapping classifies land cover under various headings. This dataset allows for the identification of lands that are likely to be most valuable to biodiversity including those which are likely to contain a habitat listed in Annex 1 of the Habitats Directive e.g., natural grasslands, peat bogs, salt marshes. CORINE Land Cover (CLC) is a map of the European environmental landscape based on interpretation of satellite images. Land cover is the observed physical cover, as seen from the ground or through remote sensing, including for example natural or planted vegetation, water and human constructions which cover the earth's surface.

The EPA's Framework National Ecological Network provides a classification of the relative importance of areas by virtue of the biodiversity and flora that they contain

and the connectivity they provide. Many of the areas identified are corridors.

designated ecology - can be estimated to be areas within 15 km of the Plan area and all downstream areas of catchments which drain the area.

#### 4.6.2 European Sites

European sites comprise Special Areas of Conservation<sup>13</sup> (SACs) and Special Protection Areas<sup>14</sup> (SPAs). The SEA uses the same zone of influence cited in the AA; a 15 km buffer around the Plan area (sites within this zone are mapped on Figure 4.1). There are no European sites within the Plan area, however there are two SACs, namely The Long Derries, Edenderry SAC (Site Code: 000925)<sup>15</sup> and Mount Hevey Bog SPA (Site Code: 002342)16 and one SPA, namely River Boyne and River Blackwater SPA (Site Code: 004232)17, within 15 km of the Plan boundary, as shown on Figure 4.1.

Other hydrologically connected European sites within the wider region beyond 15 km buffer zone (i.e. downstream of the Plan boundary) are mapped on Figure 4.2 and include: Boyne Coast and Estuary SAC (Site Code: 001957)18;

<sup>13</sup> SACs have been selected for protection under the European Council Directive on the conservation of natural habitats and of wild fauna and flora (92/43/EEC) due to their conservation value for habitats and species of importance in the European Union. The Habitats Directive seeks to establish Natura 2000, a network of protected areas throughout the EU. It is the responsibility of each member state to designate SACs to protect habitats and species, which, together with the SPAs designated under the 1979 Birds Directive, form Natura 2000. The European Communities (Birds and Natural Habitats) Regulations 2011 consolidate the European Communities (Natural Habitats) Regulations 1997 to 2005 and the European Communities (Birds and Natural Habitats) (Control of Recreational Activities) Regulations 2010. The Regulations have been prepared to address several judgments of the Court of Justice of the European Union (CJEU) against Ireland, notably cases C-418/04 and C-183/05, in respect of failure to transpose elements of the Birds Directive and the Habitats Directive into Irish law.

the River Boyne and River Blackwater SAC (Site Code: 002299)19; and Boyne Estuary SPA (Site Code: 004080)<sup>20</sup>. The AA review of all sites within this zone has allowed a determination to be made that, due to the nature and scope of the Plan, and considering Interests Qualifying and Special Conservation Interests hydrologically of connected European sites beyond 15 km (i.e. downstream of the Plan area), the Plan is not likely to not impose any potential significant effects beyond the 15 km buffer/Zone of Influence.

For more detail on European sites please refer to the AA document that accompanies the Draft Plan and this SEA Environmental Report.

#### 4.6.3 Natural Heritage Areas and Proposed Natural **Heritage Areas**

Natural Heritage Areas (NHAs) are designated due to their national conservation value for ecological and/or geological/geomorphological heritage. They cover nationally important semi-natural and natural habitats, landforms or geomorphological features, wildlife plant and animal species or a diversity of these natural attributes. NHAs are designated under the Wildlife (Amendment) Act 2000. Proposed NHAs (pNHAs) were published on a nonstatutory basis in 1995, but have not since been statutorily proposed or designated.

There are total of three NHAs and six pNHAs designated within and within 15 km of the Plan area, as mapped on Figure 4.3 and listed on Table 4.1 below. One of these sites is partially designated within the Plan boundary, Grand Canal pNHA (Site Code: 002104), as shown on Figure 4.4.

<sup>&</sup>lt;sup>14</sup> SPAs have been selected for protection under the 1979 European Council Directive on the Conservation of Wild Birds (79/409/EEC) - referred to as the Birds Directive due to their conservation value for birds of importance in the FU.

<sup>&</sup>lt;sup>15</sup> Sensitive features include: semi-natural dry grasslands and scrubland facies on calcareous substrates.

<sup>&</sup>lt;sup>16</sup> Sensitive features include: active raised bogs; degraded raised bogs still capable of natural regeneration; and depressions on peat substrates of the Rhynchosporion.

<sup>&</sup>lt;sup>17</sup> Sensitive features include: kingfisher.

<sup>&</sup>lt;sup>18</sup> Sensitive features include: embryonic shifting dunes; estuaries; salicornia and other annuals colonising mud and sand; shifting dunes along the shoreline with white dunes; fixed coastal dunes with herbaceous vegetation - grey dunes; annual vegetation of drift lines; Atlantic salt

meadows; and mudflats and sandflats not covered by seawater at low tide.

<sup>&</sup>lt;sup>19</sup> Sensitive features include: alkaline fens; Atlantic salmon; river lamprey; alluvial forests with Alnus glutinosa and Fraxinus excelsior, and otter.

<sup>&</sup>lt;sup>20</sup> Sensitive features include: shelduck; turnstone; wetland and waterbirds; black-tailed godwit; golden plover; grey plover; knot; lapwing; little tern; oystercatcher; redshank; and sanderling.

Table 4.1 NHAs and pNHAs within and within 15 km of the Plan area

NII I A a and mNII I A a			
NHAs and pNHAs			
Designation	Site		
	Code	Site Name	
NHA	000570	Black Castle Bog	
	001388	Carbury Bog	
		Molerick Bog	
	001582	_	
pNHA		The Long Derries,	
	000925	Edenderry	
	002104	Grand Canal	
	000390	Ballina Bog	
	002103	Royal Canal	
	001573	Ballynabarny Fen	
	001584	Mount Hevey Bog	

#### 4.6.4 Land Cover

Land cover is the observed physical cover, as seen from the ground or through remote sensing, including for example natural or planted vegetation, water and human constructions which cover the earth's surface.

The CORINE 2018<sup>21</sup> mapping (as shown on Figure 4.5) identifies the land cover of the Plan area as urban fabric (within central parts of the Plan area), agricultural (adjacent to the Plan area and surrounding lands), forestry (to the north and west of the Plan area) and peat bogs (adjacent to the southern parts of the Plan area).

Peatlands are a very characteristic habitat in County Offaly, with groundwater and rain fed peat soils being a prominent and typical feature in the landscape. An esker is a long narrow ridge comprising of sand, gravel and boulders, which were deposited by a stream flowing on, within, or beneath a glacier - there are twenty esker systems in Offaly. Active blanket bogs and active raised bogs are priority habitats listed on Annex I of the EU Habitats Directive. Peat soils are often indicative of areas that are the most sensitive

The CORINE (Co-ordinated Information on the Environment) land cover data series was devised as a means of compiling geo-spatial environmental information in a standardised and comparable manner. CORINE has become a key data source for informing environmental and planning policy on a national and European level. The main land cover type in Ireland is agricultural land including forestry, which accounts for two-thirds of the national landmass. Most of this is permanent grassland pastures. Peatlands and wetlands are the second most widespread land cover type, covering almost one-fifth of the country. While forested areas cover about one-tenth of the country. Despite rapid development in the past two decades, Ireland's landscape is predominantly rural and agricultural.

to development due to ecological sensitivities and impeded drainage issues. Cutaway bogs have the potential to facilitate land uses such as employment, renewable energy generation, waste management, industrial, and tourism and recreation.

Categories from CORINE mapping that may indicate areas likely to contain Annex I habitats within the Plan area include:

- Pastures:
- Land principally occupied by agriculture with significant areas of natural vegetation;
- Coniferous forest:
- Mixed forest;
- Transitional woodland-shrub; and
- Peat bogs.

There are areas likely to contain Annex I Habitats occurring partially within and adjacent to south-western and northern parts of the Plan area, as shown on Figure 4.6.

### 4.6.5 Register of Protected Areas

In response to the requirements of the Water Framework Directive (WFD) a number of water bodies or parts of water bodies that must have extra controls on their quality by virtue of how their waters are used by people and by wildlife have been listed on Registers of Protected Areas (RPAs). Entries to the RPAs within and adjacent to the area to which the Strategy relates, designated by virtue of their value to biodiversity include a number of waterdependent habitats within the area that have been listed on RPAs relating to biodiversity these relate to designated SACs and SPAs (see Section 4.6.2) and Salmonid Rivers (only those designated under S.I. 293 of 1988) and associated surface and groundwaters.

RPAs designated by virtue of their value to humans are addressed under Section 4.9.7.

#### 4.6.6 Salmonid Waters

The Salmonid Regulations (S.I. 293/1988) designate the waters capable of supporting salmon (*Salmo salar*), trout (*Salmo trutta*), char (*Salvelinus*) and whitefish (*Coregonus*) as protected. 34 (no.) rivers, tributaries and lakes are listed and protected under these Regulations that prescribe quality standards for salmonid waters, the sampling programmes and the methods of analysis and inspection to be used by local authorities to

determine compliance with the standards. A section of the River Boyne intersecting the Plan area is designated as a Salmonid Water (mapped on Figure 4.7) under the aforementioned Regulations.

## 4.6.7 Margaritifera Sensitive Areas

Freshwater pearl mussel is a globally threatened, long-lived and extremely sensitive species that can be impacted by many forms of pollution, particularly sediment and nutrient and bν hvdrological pollution morphological changes, which may arise from developments, activities or changes in any part of the catchment. There are two species of freshwater pearl mussel in Ireland (Margaritifera margaritifera and Margaritifera durrovensis) and both are protected under Annex II and Annex V of the EU Habitats Directive. There is an area of Margaritifera catchment adjacent to the southern parts of the Plan area (as shown on Figure 4.8).<sup>22</sup>

Twenty-seven Management Plans for the Freshwater Pearl Mussel have been published, the objective of which is to restore the freshwater pearl mussel populations in 27 rivers, or stretches of rivers that are within the boundaries of Special Areas of Conservation. The most significant pressures across these catchments were identified as: point sources in relation to quarries, sand/gravel pits and wastewater treatments plants; and diffuse sources associated with agriculture (including overgrazing), forestry and on-site wastewater treatment systems.

#### 4.6.8 Existing Problems

Ireland's Article 17 report on the Status of EU Protected Habitats and Species in Ireland (DCHG, 2019) identifies various Irish, EU-protected habitats and species to be of unfavourable status and many to be still declining, although it also identifies that a range of positive actions are underway. Categories for pressures and threats on Ireland's habitats and species identified by the report comprise:

- Agriculture;
- Forestry;

<sup>22</sup> Barrow catchment - with previous records of

- Extraction of resources (minerals, peat, nonrenewable energy resources);
- Energy production processes and related infrastructure development;
- Development and operation of transport systems;
- Development, construction and use or residential, commercial, industrial and recreational infrastructure and areas;
- Extraction and cultivation of biological living resources (other than agriculture and forestry);
- Military action, public safety measures, and other human intrusions;
- Alien and problematic species;
- Mixed source pollution;
- Human-induced changes in water regimes;
- Natural processes (excluding catastrophes and processes induced by human activity or climate change);
- Geological events, natural catastrophes;
- Climate change; and
- Unknown pressures, no pressures and pressures from outside the Member State.

The Plan includes measures to contribute towards the protection of biodiversity and flora and fauna and associated ecosystem services.

Previous changes in land uses arising from human development have resulted in a loss of biodiversity and flora and fauna however, legislative objectives governing biodiversity and fauna were not identified as being conflicted with.

Margaritifera, but current status unknown.

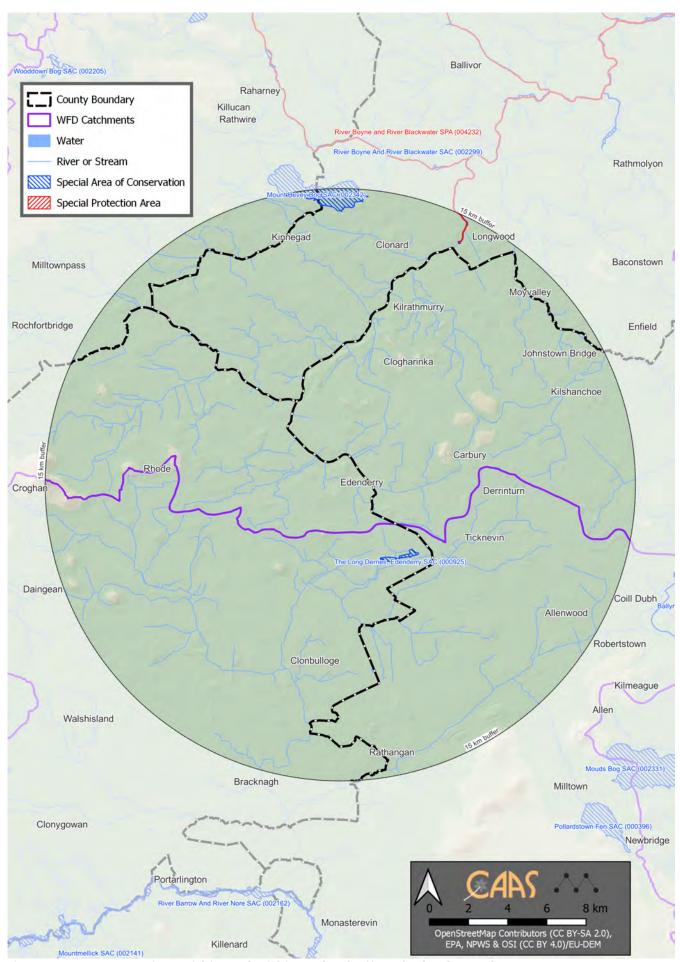


Figure 4.1 European sites within and within 15 km buffer of Edenderry Plan area

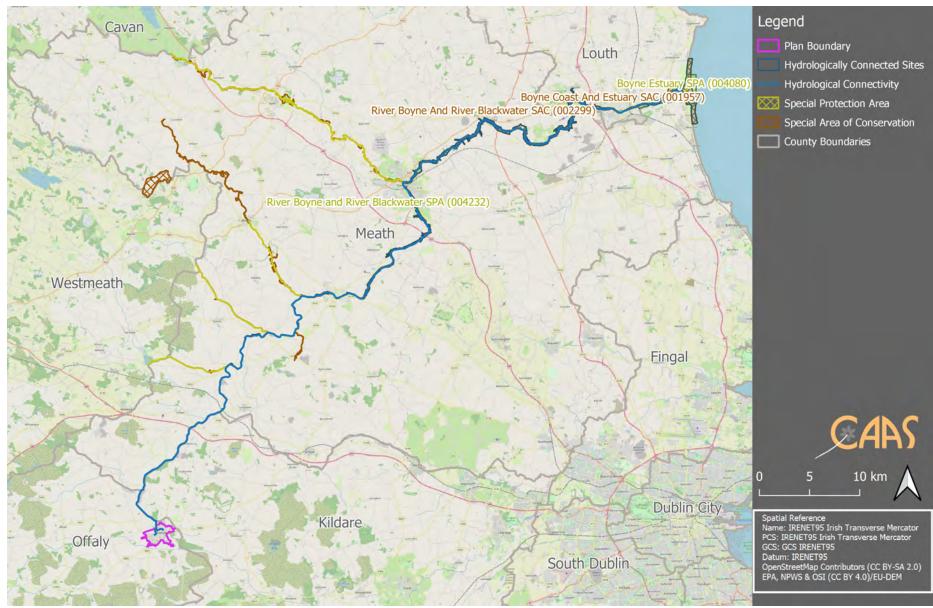


Figure 4.2 Hydrologically connected European sites beyond 15 km buffer of Edenderry Plan area

CAAS for Offaly County Council

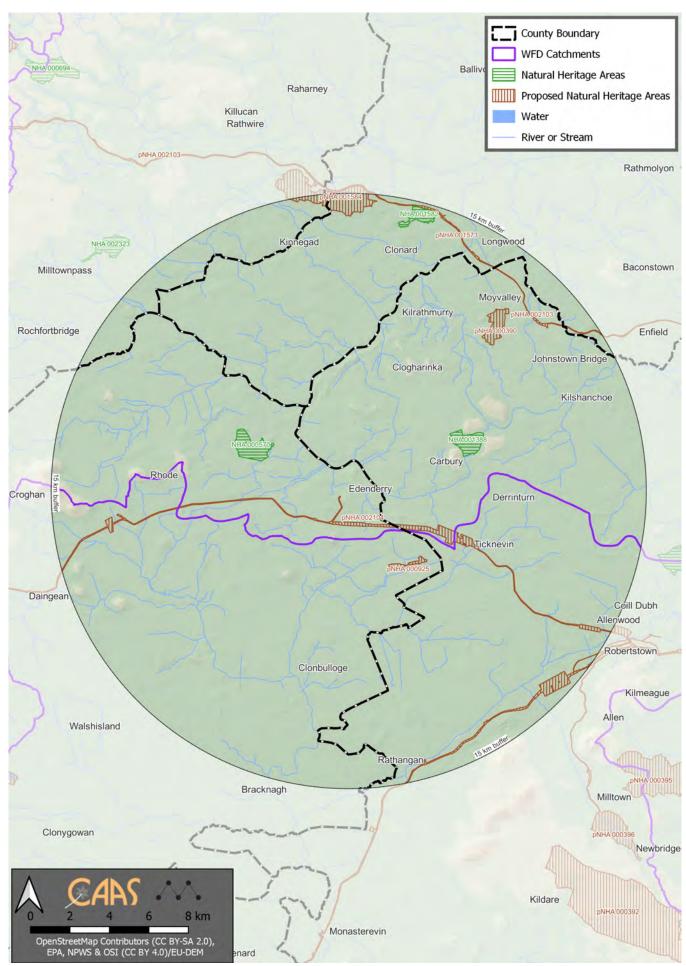


Figure 4.3 NHAs and pNHAs within and within 15 km buffer of Edenderry Plan area



Figure 4.4 pNHAs within and adjacent to Edenderry Plan area



Figure 4.5 CORINE Land Cover Mapping 2018

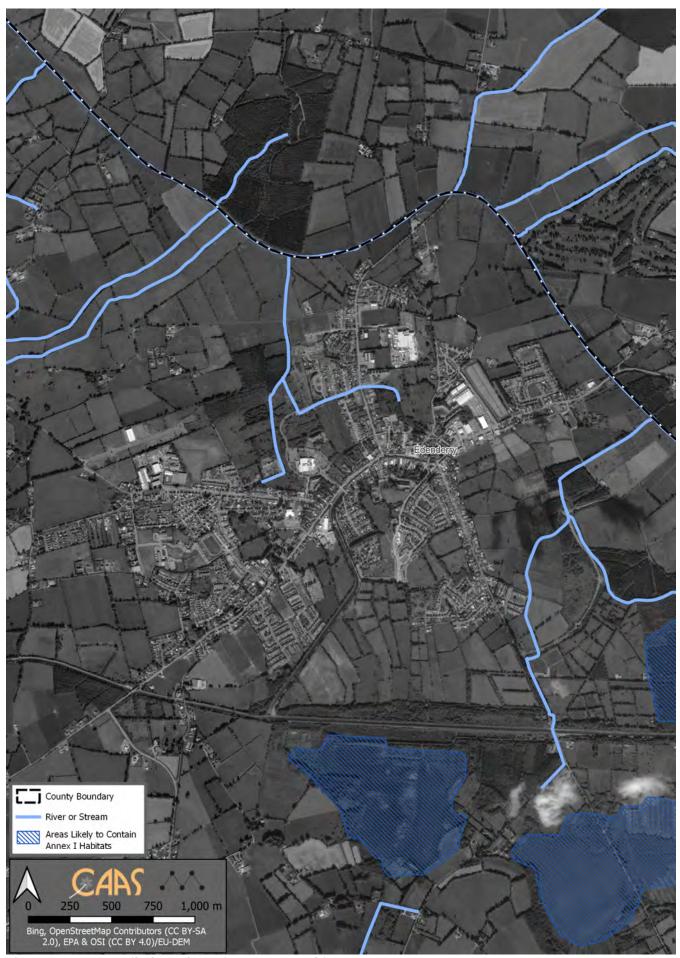


Figure 4.6 Areas Likely to Contain Annex I Habitats



Figure 4.7 Salmonid Rivers Regs

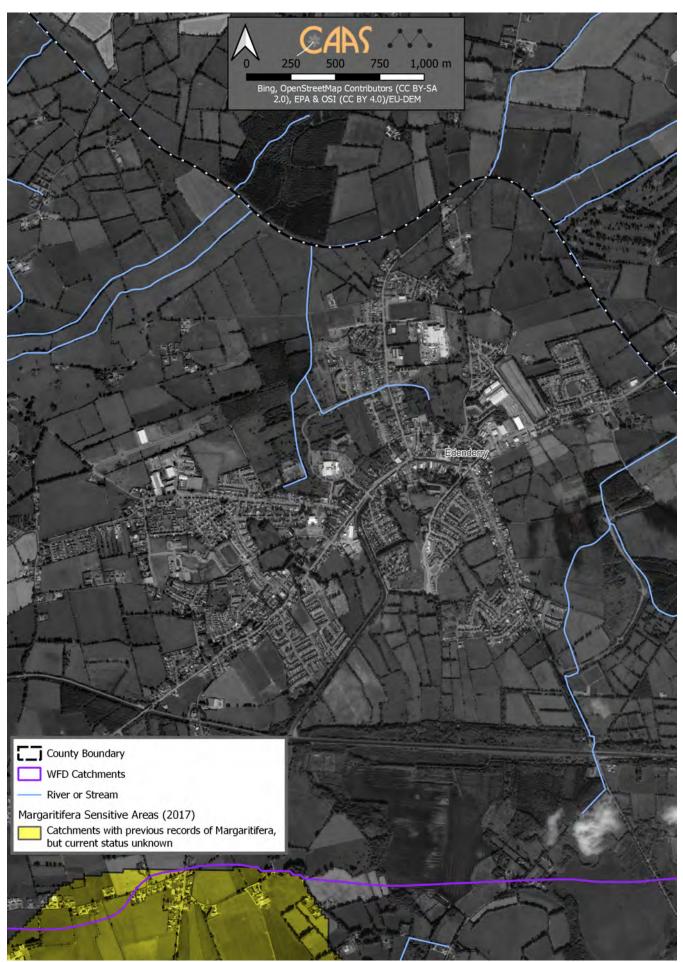


Figure 4.8 Margaritifera Sensitive Areas

## 4.7 Population and Human Health

#### 4.7.1 Population

Census 2016 recorded a population of 7,359 persons in Edenderry. The Core Strategy in the Offaly County Development Plan 2021-2027 provides a population increase of 721 persons for Edenderry over the Plan period.

Edenderry is identified as a "Self-Sustaining Town" in the Offaly County Development Plan 2021-2027, supporting the regional driver role of Tullamore, and acting as an important local driver providing a range of functions for its resident population and its surrounding catchment including housing, employment, services, retail and leisure opportunities.

The population provided for in the Plan will interact with various environmental components. Potential interactions include:

- Recreational and development pressure on habitats and landscapes;
- Contribution towards increase in demand for waste water treatment at the municipal level;
- Contribution towards increase in demand for water supply and associated potential impact of water abstraction;
- Potential interactions in flood-sensitive areas;
- Potential effects on water quality.

#### 4.7.2 Human Health

With regard to human health, impacts relevant to the SEA are those which arise as a result of interactions with environmental vectors (i.e. environmental components such as air, water or soil through which contaminants or pollutants, which have the potential to cause harm, can be transported so that they come into contact with human beings). Hazards or nuisances to human health can arise as a result of exposure to these vectors e.g. interactions with human health that could occur in urban locations that experience high levels of traffic congestion and associated particulate matter and noise emissions to air.

Emission limits for discharges to air, soil and water are set with regards to internationally recognised exposure limit values. These are generally set to be many times the safe exposure limit - in order to provide protection. In the event that a plan or programme began

to have adverse health effects on surrounding populations it is likely that it would have been identified as being in breach of such emission standards at a very early stage - and long before the manifestation of any adverse health effects in the population.

These factors have been considered with regard to the description of: the baseline of each environmental component; and the identification and evaluation of the likely significant environmental effects of implementing the Plan.

#### 4.7.3 Existing Problems

The number of homes within the Plan area with radon levels above the reference level is within the normal range experienced in other locations across the country<sup>23</sup>.

Parts of the Plan area are vulnerable to adverse effects from changes in the occurrence of severe rainfall events and associated flooding from surface water. Flooding in certain circumstances could pose a risk to human health. There is historic and predictive evidence of flooding within the Plan area (4.9.8).

Also refer to the other sections of this report referred to above with respect interactions with other environmental components.

#### 4.8 Soil

Soil is the top layer of the earth's crust. It is formed by mineral particles, organic matter, water, air and living organisms. Soil can be considered as a non-renewable natural resource because it develops over very long timescales. It is an extremely complex, variable and living medium and performs many vital functions including: food and other biomass production, storage, filtration and transformation of many substances including water, carbon, and nitrogen. Soil has a role as

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<sup>&</sup>lt;sup>23</sup> The greatest health risk from radiation in Ireland is caused by radon. The presence of radon gas, a naturally occurring radioactive gas that originates from the decay of uranium in rocks and soils, occurs across the country. It accounts for more than half of the total radiation dose received by the Irish population. As a known carcinogen, in the same category as tobacco smoke and asbestos it is a cause of lung cancer. Exposure to radon for long periods or at high concentrations can lead to lung cancer. Mapping available at <a href="http://www.epa.ie/radiation/radonmap">http://www.epa.ie/radiation/radonmap</a>

a habitat and gene pool, serves as a platform for human activities, landscape and heritage and acts as a provider of raw materials. Such functions of soil are worthy of protection because of their socio-economic as well as environmental importance. Soils in any area are the result of the interaction of various factors, such as parent material, climate, vegetation and human action.

To date, there is no legislation which is specific to the protection of soil resources. However, the EU Soil Strategy for 2030 sets out a framework and concrete measures to protect and restore soils, and ensure that they are used sustainably. It sets a vision and objectives to achieve healthy soils by 2050, with concrete actions by 2030. It also announces a new Soil Health Law by 2023 to ensure a high level of environmental and health protection.

Very large environmental challenges in the Midlands region arise from past exploitation of peatlands. These are the subject of very large-scale investment and activation – particularly using initiatives employing transition communities. Some of these may eventually offer regenerative tourism destinations.

# 4.8.1 Soil Types

Main soil types<sup>24</sup> (Figure 4.9) surrounding the built-up areas of Edenderry are peat soils (often indicative of areas that are the most sensitive to development due to ecological sensitivities and impeded drainage issues) within the north-east, east and south-east of the Plan area and luvisols (generally fertile soils, widely used for agriculture and associated with significant accumulation of clay) within the north-west, west and southwest of the Plan area.

Other soil types to the north and beyond the Plan area, also shown on Figure 4.9, include alluvial soils (associated with alluvial clay, silt or sand river deposits) and groundwater gleys (wetland soils with slowly permeable horizons resulting in seasonal waterlogging).

(http://gis.teagasc.ie/soils/soilguide.php).

## 4.8.2 County Geological Sites

Geological Survey Ireland coordinate the Irish Geological Heritage Programme, whereby an objective has been set to identify and select sites of geological interest within each county across the country. County Geological Sites (CGSs) do not receive statutory protection like Natural Heritage Areas but receive an effective protection from their inclusion in the planning system. The audit of CGSs in County Offaly was completed in 2016, which identified 28 CGSs in County Offaly, however; there are no designated geological sites within the Plan area.

#### 4.8.3 Landslides

The term "landslide" describes a wide variety of processes that result in the downward and outward movement of materials such as rock, debris, earth, mud and peat under the force of gravity. Issues such as existing ground conditions, slope stability and storage of excavated material have the potential to influence susceptibility to landslides/bog bursts. The potential impacts of landslides include loss of human life/injury, flooding, pollution of watercourses and impacts upon aquatic biodiversity.

There is one landslide event recorded at the northern bank of the Grand Canal adjacent to the southern parts of the Plan area, associated with peatland areas<sup>25</sup> (shown on Figure 4.10). The GSI have identified<sup>26</sup> the Plan area as having mainly low levels of landslide susceptibility with some areas of moderately low levels of landslide susceptibility (mapped on Figure 4.10).

# 4.8.4 Potentially Contaminated Lands and Landfill Sites

In the absence of mitigation, contaminated materials have the potential to adversely impact upon human health, water quality and habitats and species. As is the case with other urban and semi-urban areas across the country, there is potential for contamination at

<sup>&</sup>lt;sup>24</sup> All soil types belong to a Sub-Group and so in turn to one of the 11 soil Great Groups. Great Groups and Sub-Groups are a hierarchical arrangement of soils used for taxonomical classification

<sup>&</sup>lt;sup>25</sup> Landslide events are recorded in the National Landslides Database available from GSI (<u>www.gsi.ie</u>).

<sup>&</sup>lt;sup>26</sup> https://www.gsi.ie/en-ie/programmes-and-projects/geohazards/projects/Pages/Landslide-Susceptibility-Mapping.aspx

sites within the Plan area, especially where land uses occurred in the past, in the absence of environmental protection legislation.

# 4.8.5 Existing Problems

Legislative objectives governing soil were not identified as being conflicted with.

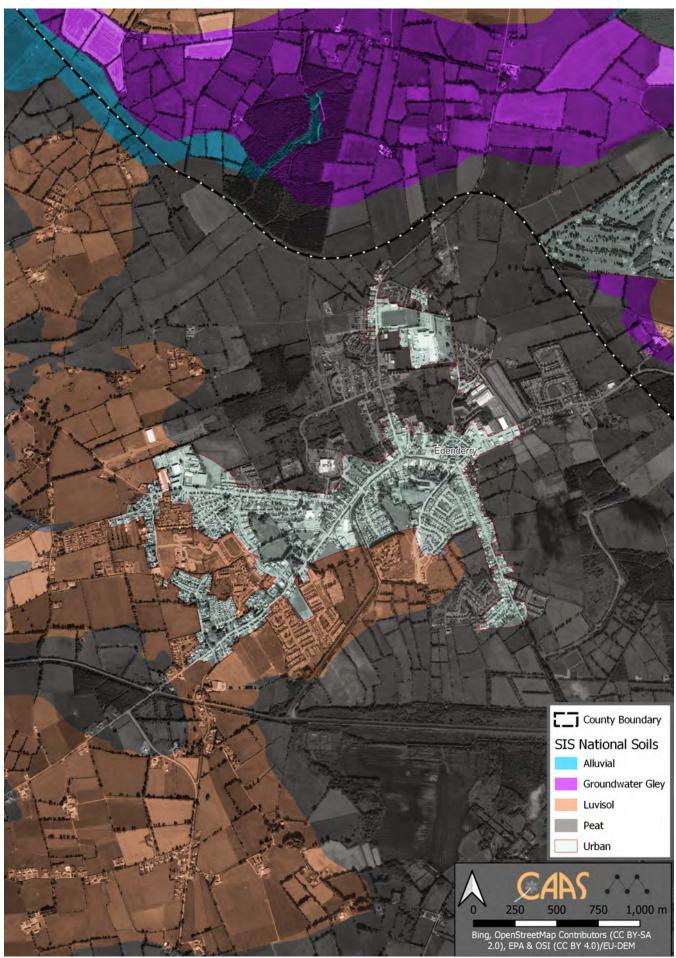


Figure 4.9 Soil types

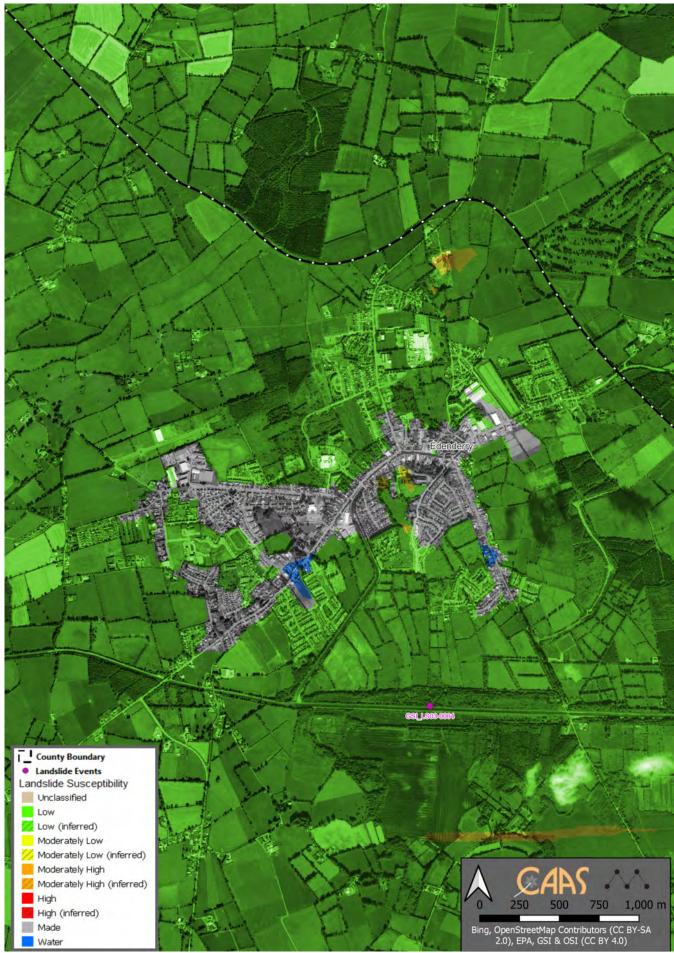


Figure 4.10 Landslide susceptibility

#### 4.9 Water

# 4.9.1 The Water Framework Directive

Since 2000, Water Management in the EU has been directed by the Water Framework Directive 2000/60/EC (WFD). The WFD requires that all Member States implement the necessary measures to prevent deterioration of the status of all waters - surface, ground, estuarine and coastal - and protect, enhance and restore all waters with the aim of achieving *good status*. All public bodies are required to coordinate their policies and operations so as to maintain the *good status* of water bodies which are currently unpolluted and improve polluted water bodies to *good status*.

Article 4 of the WFD sets out various exemptions for deterioration in status caused as a result of certain physical modifications to water bodies. This is provided: all practicable mitigation measures are taken; there are reasons of overriding public interest or the benefits to human health, safety or sustainable development outweigh the benefits in achieving the WFD objective; there are no better alternatives; and the reasons for the physical modification are explained in the River Basin Management Plan (RBMP).

The EU's Common Implementation Strategy Guidance Documents No. 20 and 36 provide guidance on exemptions to the environmental objectives of the WFD.

For the purpose of assessment, reporting and management, water is divided into groundwater, rivers, lakes, estuarine waters and coastal waters which are in turn divided into specific, clearly defined water bodies.

#### 4.9.2 Zone of Influence

The Zone of Influence of the Plan beyond the Edenderry Plan area with respect to impacts upon waters can be estimated to be all groundwater and surface water bodies that are downstream of catchments which drain the Plan area.

## 4.9.3 Surface Water Drainage

A catchment is an area of land contributing to a waterbody, with all the water ultimately running off to a single outlet. The WFD requires water quality management to be based on natural river catchments i.e. by reference to the natural, environmental unit rather than by reference to administrative or legal boundaries, which often fragment river catchments.

The River Boyne and its tributaries flow from east to west through the north and east of the Plan area and towards the Irish Sea. The Grand Canal flows through and adjacent to the south of the Plan area, with the 'Edenderry Branch' flowing through the central parts of the Plan area.

#### 4.9.4 Surface Water Status

The WFD defines 'overall surface water status' as the general expression of the status of a body of surface water, determined by the poorer of its ecological status and its chemical status. Thus, in order to achieve 'good surface water status' both the ecological status and the chemical status of a surface water body need to be at least 'good'.

The ecological status is an expression of the structure and functioning of aquatic ecosystems associated with surface waters. Such waters are classified as of 'good ecological status' when they meet Directive requirements.

Chemical Status is a pass/fail assignment with a failure defined by a face-value exceedance of an Environmental Quality Standards (EQS) for one or more Priority Action Substances (PAS) listed in Annex X of the Water Framework Directive (WFD). The EQS values for individual PAS substances are set at European level. Good surface water chemical status means that concentrations of pollutants in the water body do not exceed the environmental limit values specified in the Directive.

The current WFD (2016-2021) status of the Grand Canal Main Line (Boyne)<sup>27</sup> within and adjacent to the southern parts of Plan area is *good*. The status of the various sections of the

<sup>&</sup>lt;sup>27</sup> As per EPA classification system (gis.epa.ie/EPAMaps)

River Boyne within and surrounding the Plan area is *moderate* (Boyne\_10), to the east and north-east of the Plan area, and *poor* (Boyne\_20) within and adjacent to the Plan area, to the east and north. Subject to exemptions provided for by Article 4 of the WFD, these water bodies will need improvement in order to comply with the objectives of the WFD. Figure 4.11 illustrates the WFD surface water status within and surrounding the Plan area.

In addition to this, many water bodies are identified by the EPA as being at risk of not achieving their water quality objectives due to the damage being caused by significant pressures. Significant pressures, those pressures which need to be addressed in order to improve water quality, have been identified for waterbodies that are 'At Risk' of not meeting their water quality objectives under the WFD. There are various types of pressures identified. Sections of the River Boyne intersecting the Plan area are identified with pressures related to:

- Agricultural pressures can include issues related to farming including loss of excess nutrients and sediment loss to surface waters from diffuse sources such as spreading of fertilisers and manures. Excess phosphorous and sediment are typically issues for rivers and lakes, and too much nitrogen is the main issue for estuaries and coastal waters.
- Urban run-off pressures can include leaking sewers and run-off from paved and unpaved areas and misconnections where private foul connections are connected to storm sewers instead of the foul sewer network.
- Urban wastewater pressures can include direct discharge of nutrients from urban wastewater treatment plants and discharge from combined storm overflows or storm water overflows. Discharges of elevated concentrations of phosphorus, ammonium and nitrogen impact on the ecology of surface waters
- Hydromorphological and anthropogenic pressures are identified together in many instances. Hydromorphological pressures can include: modifications to the physical habitat conditions or the natural functioning of a waterbody which can impact on ecology, caused by dredging and straightening of rivers (chanellisation), land drainage or hard infrastructure such as dams, weirs, culverts or other obstructions. Anthropogenic pressures can include: water abstractions; invasive species; agriculture; use of fertilizers, manures and

pesticides; animal husbandry activities; inefficient irrigation practices; deforestation of woods; aquaculture; pollution due to industrial effluents and domestic sewage; mining; and recreational activities.

- Extractive industry-related pressures can include different activities that lead to the extraction of raw materials from the earth, such as oil, metals, mineral and aggregates. Impacts from extractive sites include sediment/siltation pollution and alteration to the physical environment.
- Domestic wastewater pressures can include septic-tank systems associated with one-off housing and small unlicensed private urban waste-water treatment plants. If not correctly installed and well maintained, these systems can result in leakage of untreated effluent to waters.

#### 4.9.5 Groundwater Status

Groundwater is stored in the void spaces in underground layers of rock, or aquifers. These aquifers are permeable, allowing both the infiltration of water from the soils above them and the yielding of water to surface and coastal waters. Groundwater is the part of the subsurface water that is in the saturated zone - the zone below the water table, the uppermost level of saturation in an aquifer at which the pressure is atmospheric, in which all pores and fissures are full of water.

For groundwater bodies, the approach to classification is different from that for surface water. For each body of groundwater, both the chemical status and the quantitative must be determined. Both have to be classed as either *good* or *poor*. The WFD sets out a series of criteria that must be met for a body to be classed as good chemical and quantitative status.

The WFD status (2016-2021) of all groundwater underlying the Plan area (mapped on Figure 4.11) is currently identified as being of *good status*, meeting the objectives of the WFD.

# 4.9.6 Aquifer Vulnerability and Productivity

The Geological Survey of Ireland (GSI) rates groundwaters according to both their productivity and vulnerability to pollution.

Aquifer vulnerability refers to the ease with which pollutants of various kinds can enter into groundwater. The aquifers underlying

 $<sup>^{28}</sup>$  EPA (2019): Report on Water Quality in Ireland 2013-2018

most the Plan area are mapped on Figure 4.12 and generally classified as being of:

- High and Extreme vulnerability and Extreme (Rock at or near surface or karst), within the most parts of the Plan area;
- Moderate and low vulnerability, surrounding the central parts of the Plan area; and
- Low vulnerability, adjacent to the south-east of the Plan area.

The GSI also rates aquifers based on the hydrogeological characteristics and on the value of the groundwater resource. This is referred to as aquifer productivity and is mapped on Figure 4.13. Aquifers in the vicinity of the Plan area are classified as being either:

- Locally important aquifer bedrock which is generally moderately productive, within the most of the Plan area; or
- Locally important aquifer bedrock which is moderately productive only in local zones, in some areas within and surrounding the Plan area.

# 4.9.7 WFD Registers of Protected Areas

The WFD requires that Registers of Protected Areas (RPAs) are compiled for a number of water bodies or part of water bodies which must have extra controls on their quality by virtue of how their waters are used by people and by wildlife.

The WFD requires that these RPAs contain: areas from which waters are taken for public or private water supply schemes; designated shellfish production areas; bathing waters; areas which are affected by high levels of substances most commonly found in fertilizers, animal and human wastes - these areas are considered nutrient sensitive; areas designated for the protection of habitats or species e.g. Salmonid areas; Special Areas of Conservation (SACs); and, Special Protection Areas (SPAs). Also refer to Section 4.6.5.

The groundwater underlying the Plan and surrounding areas are used for drinking water abstraction in accordance with European Communities (Drinking Water) (No. 2) Regulations 2007 (S.I. No. 278/2007) and are identified on the RPAs for Drinking Water Ground or Surface Water Bodies (mapped on Figure 4.14.

Some of the groundwater bodies underlying and adjacent to the Plan area Figure 4.14 are connected to a RPAs for Nutrient Sensitive Areas. Nutrient Sensitive Areas are listed in accordance with the European Urban Waste

Water Treatment Directive 91/271/EEC on Urban Waste Water Treatment and transposing Regulations.

## 4.9.8 Flooding

A Strategic Flood Risk Assessment (SFRA) document accompanies this SEA Environmental Report and the Draft Plan. Requirements in relation to SFRA are provided under 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (Department of Environment and Office of Public Works, 2009) and associated Department of the Environment, Community and Local Government Circular PL2/2014.

Flood risk management and drainage provisions are already in force through the County Development Plan and related provisions have been integrated into the LAP. In addition, land use zoning contained within the Draft Plan has been informed by the SFRA process and associated delineation of flood risk zones.

Historical flooding is documented by the Office of Public Works (see Figure 4.15). The most significant source of flood risk within the Plan area is from fluvial (from rivers/streams, including from the River Boyne and its tributaries) however there are other sources of flooding present including those from pluvial (from rainwater) and surface drainage systems.

Predictive flood risk mapping is also available from the Office of Public Works and is included in the SFRA document that accompanies the Plan.

# 4.9.9 Existing Problems

Subject to exemptions provided for by Article 4 of the WFD, based on available water data, certain surface and groundwater bodies will need improvement in order to comply with the objectives of the WFD. The Plan includes provisions that will contribute towards improvements in the status of waters.

There is historic and predictive evidence of elevated levels of flood risk from fluvial sources at various locations across the Plan area. The preparation of the Plan, SEA and SFRA has taken place concurrently and the findings of the SFRA have informed both the Plan and the SEA.

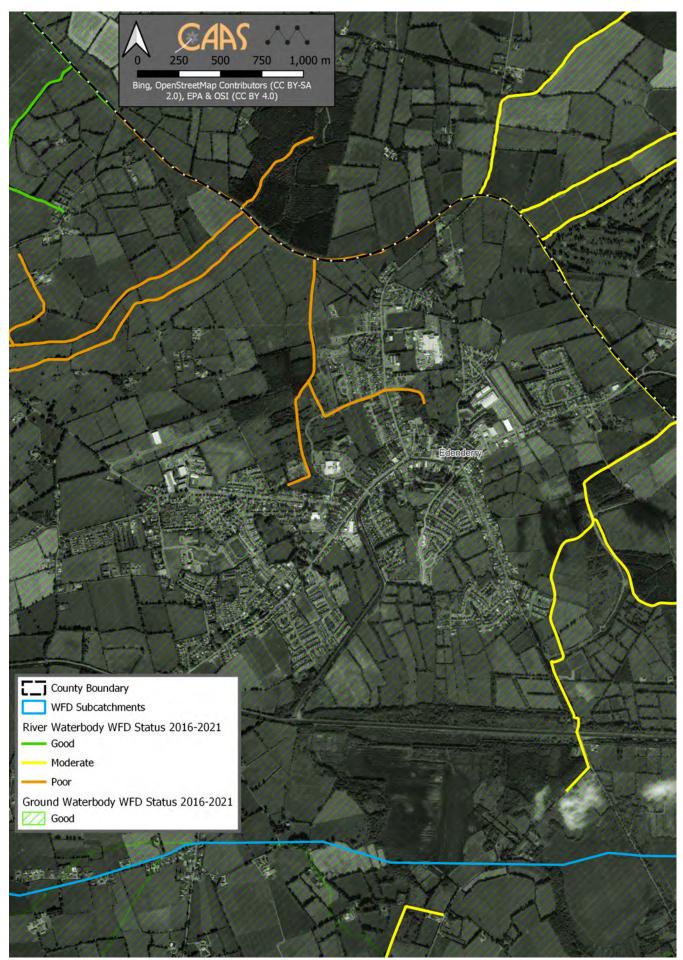


Figure 4.11 WFD Surface Waterbodies and WFD Ground Waterbodies Status (2016-2021)

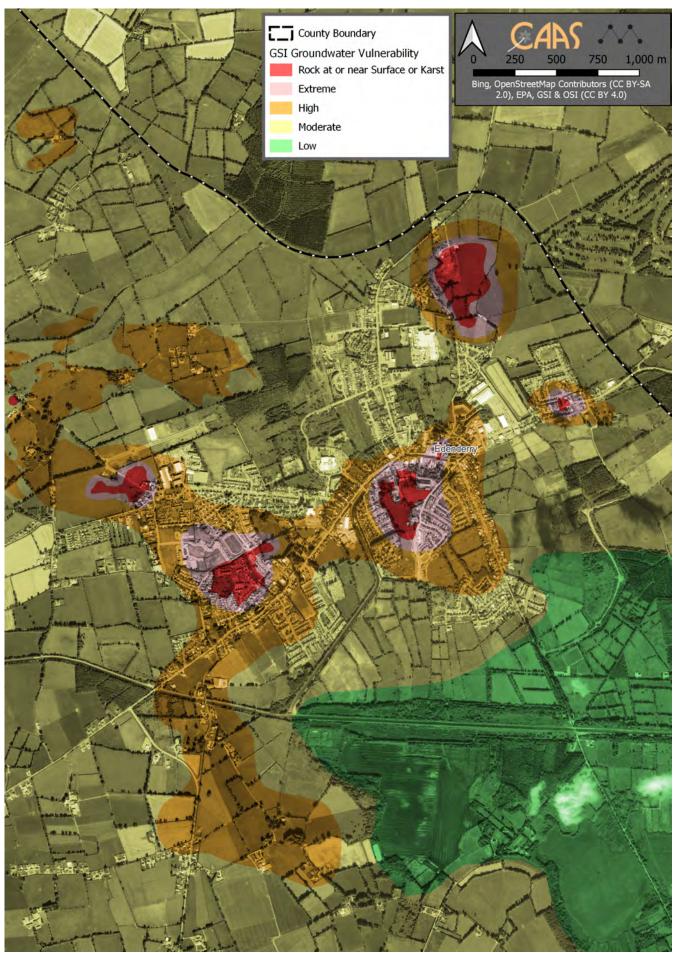


Figure 4.12 Groundwater Vulnerability



**Figure 4.13 Aquifer Productivity** 



Figure 4.14 WFD RPA Nutrient sensitive Areas and WFD RPA Drinking Water



Figure 4.15 OPW Past Flood Events

# 4.10 Air and Climatic Factors

#### 4.10.1 Climatic Factors

Interactions with climatic factors are also present with other environmental components including water/flooding (see Section 4.9.8).

Total emissions of greenhouse gases by humans come from various sectors including transport, agriculture, energy industries, manufacturing combustion, industrial developments, residential processes, commercial services developments, waste management processes and fluorinated gases equipment (such as refrigeration and fire protection systems).

Ireland's Provisional Greenhouse Gas Emissions 1990-2020 (EPA, 2021) report details provisional estimates of greenhouse gas emissions for the period 1990-2020. In 2020 total national greenhouse gas emissions are estimated to have declined by 3.6% on 2019 levels to 57.70 million tonnes carbon dioxide equivalent (Mt CO2eq). This reduction in total emissions was driven by the COVID impact on transport and less peat used for electricity generation. It highlights that further, transformative measures will be needed to meet national climate ambitions.

Greenhouse gas emissions from the transport sector decreased by 15.7% or 1.92 Mt  $CO_2eq$  in 2020. This decrease was largely driven by the impact of COVID restrictions on passenger car and public transport usage. International aviation, not included in the national total emissions, declined by 65% in 2020 or by 2.17 Mt  $CO_2eq$ .

The EPA 2022 publication *Ireland's Greenhouse Gas Emission Projections 2021-2040* provides an assessment of Ireland's total projected greenhouse gas emissions from 2021 to 2040, updated using the latest Inventory data for 2020. The report provides an assessment of Ireland's progress towards achieving its national ambitions under the Climate Action and Low Carbon Development (Amendment) Act 2021 and EU emission reduction targets for 2030 as set out under the

Effort Sharing Regulation<sup>29</sup> Key findings identified as part of the report are that:

- Urgent implementation of all climate plans and policies, plus further new measures, are needed for Ireland to meet the 51 per cent emissions reduction target and put Ireland on track for climate neutrality by 2050.
- Ireland can meet its non-ETS EU targets of a 30 per cent emission reduction by 2030 (compared to 2005) assuming implementation of planned policies and measures and the use of the flexibilities available. These include a land use flexibility using the Climate Action Plan 2021 afforestation rate of 8,000 hectares per annum.
- The gap between the 'Existing Measures' and 'Additional Measures' scenarios in these projections highlights that the current pace of implementation will not achieve the change required to meet the Climate Act targets. Faster implementation of 'Additional Measures' is needed to close this gap.
- Carbon budgets proposed by the Climate Change Advisory Council have recently been approved by the Oireachtas for the periods 2021-25, 2026-30 and 2031-35. The Projections highlight that there is currently a significant gap between the budgets and the projected emissions over the budget periods. This gap will need to be addressed very quickly if Ireland is to stay within the Carbon Budgets.
- Under the Additional Measures scenario, renewable energy is projected to increase to 78 per cent of electricity generation by 2030 with emissions from the Energy Industry decreasing by 10 per cent per annum from 2021-30. Increased coal use from 2021 and growing energy demand, including from data centres, threaten to negatively impact achievement of National targets, particularly for the first carbon budget period.
- Under the Existing Measures scenario emissions are projected to increase by 1.9 per cent over the 2020-2030 period. A methane emissions reduction of almost 30 per cent is required to achieve a 22 per cent reduction in agriculture emissions compared to 2018, as committed to in the 2021 Climate Action Plan. The sector must clearly set out how this will be achieved to address uncertainty regarding its ability to deliver even the lower end of the range of its sectoral targets within the ever-shortening timeframe to 2030.
- The end of COVID travel restrictions is projected to result in transport emissions increasing by 18-19 per cent from 2020 to 2022. Emissions from the sector are projected to reduce to 39 per cent below 2018 levels by 2030 and achieve a 31.7 per cent renewable transport share if the additional measures in plans and policies are implemented, this includes over 940,000 electric vehicles on the road by 2030, increased biofuel blend rates and measures to support more sustainable transport.

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<sup>&</sup>lt;sup>29</sup> Regulation (EU) 2018/842 of on binding annual greenhouse gas emission reductions by Member States from 2021 to 2030 contributing to climate action to meet commitments under the Paris Agreement.

 Spending more time at home due to hybrid working and the increasing cost of fossil fuels highlights the need for our houses to become far more efficient. Implementing currently planned measures for the installation of 680,000 heat-pumps by 2030 as well as retrofitting 500,000 homes is projected to achieve a 41.5 per cent reduction in residential emissions in 2030 (compared to 2018).

# 4.10.2 Climate Mitigation and Adaptation

Climate mitigation describes the action to reduce the likelihood of climate change occurring or reduce the impact if it does occur. This can include reducing the causes of climate change (e.g. emissions of greenhouse gases) as well as reducing future risks associated with climate change.

The revised National Climate Action Plan 2021 provides a detailed plan for taking action to achieve a 51% reduction in overall greenhouse gas emissions by 2030 with a goal to reach net-zero emissions by no later than 2050, as set out in the Climate Act 2021. The Plan lists the actions needed to deliver on climate targets and sets indicative ranges of emissions reductions for each sector of the economy. It will be updated annually, including in 2022, to ensure alignment with legally binding economy-wide carbon budgets and sectoral ceilings.

Climate adaptation is a change in natural or human systems in response to the impacts of climate change. These changes moderate harm or exploit beneficial opportunities and can be in response to actual or expected impacts.

The National Adaptation Framework Department of Communications, Climate Action and Environment, 2018), sets out the national strategy to reduce the vulnerability of the country to the negative effects of climate change and to avail of positive impacts. The National Adaptation Framework outlines a whole of government and society approach to climate adaptation. Under the Framework, a number of Government Departments will be required to prepare sectoral adaptation plans in relation to a priority area that they are responsible for.

The statutory Climate Change Adaptation Plan for the Transport Sector was prepared under the Climate Action and Low Carbon Development Act (2015) and the National Adaptation Framework (2018) and published by the Department of Transport in 2019. The Plan sets out the national strategy to reduce Ireland's vulnerability to the negative effects of climate change and to avail of any positive impacts, with an objective to help develop resilience within the sector in order to safeguard transport infrastructure from future climate impacts.

The Offaly County Council Climate Change Adaptation Strategy 2019-2024 features a range of actions across sectors including: seafood, agriculture, forestry, biodiversity, built and archaeological heritage, transport infrastructure, electricity and gas networks, communication networks, flood risk management, water quality, water services infrastructure and health. The Strategy seeks to:

- Ensure a proper comprehension of the key risks and vulnerabilities of climate change
- Bring forward the implementation of climate resilient actions in a planned and proactive manner; and
- Ensure that climate adaptation considerations are mainstreamed into all plans and policies and integrated into all operations and functions of Offaly County Council.

# 4.10.3 Alternative Fuels and Renewable Electricity Generation Targets

The use of alternative fuels, including electricity, forms a significant part of government policy to reduce transport emissions. The Draft Plan facilitates a mode shift away from the private car to public transport, walking and cycling and provisions relating to electric vehicles. This will contribute towards reductions in the consumption of non-renewable energy sources and achievement of legally binding renewable energy targets.

The Renewable Energy Directive (Directive 2009/28/EC) requires each Member State to adopt a national renewable energy action plan (NREAP) to set out Member States' national targets for the share of energy from renewable sources consumed in transport, electricity and heating in 2020 that will ensure delivery of the overall renewable energy target. These sectoral targets are referred to as RES-E (electricity), RES-T (transport) and RES-H (heat).

The overall target for Ireland in Directive 2009/28/EC was 16% share of renewable

energy in Gross Final Consumption (GFC) by 2020. Under the Directive (2009/28/EC), Ireland was obliged to deliver 10% of transport energy by renewable sources by 2020<sup>30</sup>. SEAI's 2021 publication "Energy in Ireland 2021" report includes the most recent assessment of Ireland's progress towards renewable energy targets up to 2020 and identifies that Ireland:

- Did not meet its EU 2020 overall renewable energy target. The overall share of renewable energy was 13.5%, compared to the target of 16%:
- Succeeded against its EU 2020 renewable energy target for transport (10.2% vs. 10%), and just missed its renewable energy target for electricity (39.1% vs. 40%);
- Achieved just half its 2020 renewable energy target for heating and cooling (6.3% vs. 12%);
   and
- Energy from renewable sources grew by 8.9% in 2020.

# 4.10.4 Energy Security

Greater use of alternative fuels, including renewable energy, has the potential to further contribute towards energy security.

Indigenous production accounted for 32% of Ireland's energy requirements in 1990. since the mid-1990s import However, dependency had grown significantly, due to the increase in energy use together with the decline in indigenous natural gas production at Kinsale since 1995 and decreasing peat production. Ireland's overall dependency reached 90% in 2006. It varied between 85% and 90% until 2016 when it fell to 69%. This trend reflects the fact that Ireland is not endowed with significant indigenous fossil fuel resources and has only in recent years begun to harness significant quantities of renewable resources and more recently natural gas from the Corrib field.

# 4.10.5 Ambient Air Quality

In order to protect human health, vegetation and ecosystems, EU Directives set down air quality standards in Ireland and the other Member States for a wide variety of pollutants. These pollutants are generated through fuel combustion, in space heating, traffic,

<sup>30</sup> Department of Communications, Climate Action and Environment (2017) National Renewable Energy Action Plan Fourth Progress Report submitted under Article 22 of Directive 2009/28/EC. electricity generation and industry and, in sufficient amounts, could affect the well-being of the areas inhabitants. The EU Directives include details regarding how ambient air quality should be monitored, assessed and managed.

The principles to this European approach are set out in the Ambient Air Quality and Cleaner Air for Europe (CAFE) Directive (2008/50/EC) (which replaces the earlier Air Quality Framework Directive 1996 and the first, second and third *Daughter Directives*; the fourth *Daughter Directive* will be included in CAFE at a later stage).

In order to comply with the directives mentioned above, the EPA measures the levels of a number of atmospheric pollutants. For the purposes of monitoring in Ireland, four zones are defined in the Air Quality Standards Regulations 2002 (S.I. No. 271 of 2002).

The EPA's (2022) *Air Quality in Ireland 2021* identifies that:

- Air quality in Ireland is generally good, however, there are localised issues.
- Ireland met all of its EU legal requirements in 2021 but it failed to meet the new WHO-based guideline levels for Health in 2021.
- Air quality monitoring results in 2021 showed that fine particulate matter (PM<sub>2.5</sub>) mainly from burning solid fuel, and nitrogen dioxide (NO<sub>2</sub>) mainly from road transport, remain the main threats to good air quality.
- It is estimated that there are approximately 1,300 premature deaths annually in Ireland due to poor air quality from fine particulate matter (PM<sub>5</sub>).

With regards to solutions, the report identifies that:

- Ireland and Europe should move towards achieving the health-based WHO air quality guidelines.
- The planned National Clean Air Strategy for Ireland needs to be published and fully implemented.
- Local Authorities must provide more resources to increase air enforcement activities.
- National investment in clean public transport is needed across the country.

In order to apply with European Directives relating to air quality, the EPA manages the National Ambient Air Quality Network and measures the levels of a number of

atmospheric pollutants at locations across the country.<sup>31</sup>

#### 4.10.6 Noise

Noise is unwanted sound. The Noise Directive - Directive 2002/49/EC relating to the assessment and management of environmental noise - is part of an EU strategy setting out to reduce the number of people affected by noise in the longer term and to provide a framework for developing existing EU policy on noise reduction from source. The Directive requires competent authorities in Member States to:

- Draw up strategic noise maps for major roads, railways, airports and agglomerations, using harmonised noise indicators and use these maps to assess the number of people who may be impacted upon as a result of excessive noise levels:
- Draw up action plans to reduce noise where necessary and maintain environmental noise quality where it is good; and,
- Inform and consult the public about noise exposure, its effects, and the measures considered to address noise.

In compliance with the Directive transposing Environmental Noise Regulations (S.I. No. 140 of 2006), Noise Action Plans have been prepared for each local authority area within the country, including for Offaly County Council (Noise Action Plan 2018-2023). The purpose of the Noise Action Plan is to avoid, prevent and reduce, on a prioritised basis the harmful effects, including annoyance due to the long-term exposure environmental noise.

# 4.10.7 Existing Problems

The Climate Change Advisory Council's *The Annual Review 2021* raised the issue of the implementation gap whereby ambition on climate policy was not being matched by verifiable actions. Several issues regarding implementation continue to cause concern and are re-emphasised throughout *The Annual Review 2022*, such as: achieving compliance with national and EU targets will require a significant acceleration in the planning of new measures; and full and rapid implementation of already announced measures will be necessary to achieve these goals.

Air quality and noise present challenges, especially in urban areas, as detailed under the relevant sub-sections above. With regard to air quality, air pollution from transport is dominated by  $NO_x$  emissions. Of these,  $NO_2$  is particularly impactful from a health perspective. The Draft Plan will help to facilitate reductions in emissions and a transition from dependence on fossil fuel combustion powered transport.

#### 4.11 Material Assets

Other material assets, in addition to those detailed below, covered by the SEA include archaeological and architectural heritage (see Section 4.12) natural resources of economic value, such as water and air (see Sections 4.9 and 4.10).

# 4.11.1 Public Assets and Infrastructure

Public assets and infrastructure that have the potential to be impacted upon by the Plan, if unmitigated, include; the town of Edenderry; resources such as public open spaces, parks and recreational areas; public buildings and services; transport and utility infrastructure (electricity, gas, telecommunications, water supply, waste water infrastructure etc.); and natural resources that are covered under other topics such as water and soil.

#### 4.11.2 Land

The Plan has the potential to assist with the reuse and regeneration of brownfield sites thereby contributing towards sustainable mobility and reducing the need to develop greenfield lands and associated potential adverse environmental effects. Brownfield lands are generally located within urban/suburban areas.

#### 4.11.3 Green Infrastructure

Parks and open space promote health and well-being, provide recreational facilities and range of habitats for various species. Green infrastructure (GI) is also a crucial component in building resilient communities capable of adapting to the consequences of climate change with trees, woodlands and wetlands providing carbon capture and slowing water flows while improving air quality.

<sup>&</sup>lt;sup>31</sup> For more detail on current daily air quality data for the Plan refer to: https://gis.epa.ie/EPAMaps/.

The primary GI assets in the town are the extensive grounds of the Blundell Park in the centre of the town, the Grand Canal, the River Boyne and large tracts of agricultural land. These primary assets are supported by a wide range of playing pitches, public open spaces, agricultural grassland, woodlands and grassy strips between footpaths and road surfaces, all of which perform different GI functions.<sup>32</sup>

# 4.11.4 Forestry

Some parts of the Plan area are covered by forestry. Woodlands provide recreational opportunities in addition to their heritage and economic benefits. They are a valuable resource in terms of biodiversity, recreation and tourism, and also important as links in the green infrastructure network.

#### 4.11.5 Peatlands

Some parts of the Plan area are covered by peatlands. Peatlands provide a valuable natural and archaeological resource. Peatlands are also important controllers of water levels in river catchments, providing a source of water in dry conditions and soaking up excess water during wetter periods; they actively capture and hold carbon and are an important natural resource in combatting climate change. Cutaway bogs have the potential to facilitate land uses such as employment, renewable energy generation, waste management, industrial, and tourism and recreation. Peat soils are often indicative of areas that are the most sensitive to development due to ecological sensitivities and impeded drainage issues.

## 4.11.6 Transport

Edenderry is strategically located on the edge of the Greater Dublin Area. The upgraded R402 provides access to the M6/N6, making Edenderry more accessible to Dublin and Galway, and links Edenderry to Tullamore. Bus Éireann provides public transport services to the town, including the Edenderry to Dublin service daily and private operators provide direct bus services to Tullamore. Enfield and Tullamore represent the nearest railway connections and as a result bus travel remains the primary form of public transport servicing the town. National, regional and local roads

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provide vital links between the towns and villages to retail, service and employment centres throughout the County and to adjoining counties.

A Local Transport Plan (LTP) has been integrated into the Plan to help ensure a shift towards more sustainable modes of transport.

### 4.11.7 Minerals and Aggregates

Minerals such as iron and copper and aggregates such as sand and gravel can occur throughout the country. Minerals and aggregates are essential to manufacturing and construction. Minerals localities within and surrounding Edenderry are mapped on Figure 4.16.

The GSI have a suite of data sources available that would be useful in planning and assessing individual projects with regard to the environmental topic(s) of soil and/or material assets. These include:

- Aggregate Potential Mapping;
- Bedrock mapping;
- Quaternary and Physiographic mapping; and
- National Aquifer and Recharge mapping.

#### 4.11.8 Water Services

#### 4.11.8.1 Waste Water

The EPA's 2022 report 'Urban Waste Water Treatment in 2021' identified that:

- 12 large urban areas that did not meet European Union treatment standards in 2021 require improvements to comply with these standards;
- 32 towns and villages discharging raw sewage into the environment every day must be connected to wastewater treatment plants;
- 6 collecting systems (sewers) must be upgraded to address the findings of a judgement from the Court of Justice of the European Union;
- 38 priority areas require improvements to protect rivers, lakes, estuaries and coastal waters that are adversely impacted by wastewater; and
- 12 areas need improvements in wastewater treatment to protect endangered freshwater pearl mussels.

Based on the EPA's assessment of monitoring information provided by Irish Water and the enforcement activities carried out by the EPA, this report identifies urban areas with the most important environmental issues that must be addressed.

From January 2014, Irish Water became responsible for all public water services, involving the supply of drinking water and the collection, treatment and disposal of waste water. Irish Water is also responsible for the treatment and disposal of the sludge that is generated from both its water and waste water treatment plants. The Council is an agent of Irish Water for operations and remains the designated Water Authority for the assessment and approval of on-site waste water treatment systems and is responsible for surface water drainage in the town.

The provision of well-maintained quality waste water treatment infrastructure is essential to facilitate sustainable development of the town while also protecting the environment and public health. Irish Water is now responsible for the collection, treatment and disposal of waste water where public waste water facilities exist in towns and villages.

Irish Water, working in partnership with Offaly County Council, is making investments to undertake essential upgrade works to waste water treatment plants in towns and villages across the County. The upgrading of infrastructure will contribute towards compliance with the Water Framework Directive, EU Urban Waste Water Treatment Directive and Drinking Water Regulations and will help to protect human health and maintain the quality of surface and ground waters.

#### 4.11.8.2 Wastewater Infrastructure

The Wastewater Treatment Plant (WWTP) serving Edenderry is not currently listed as a priority area (such areas are those where improvements are required to resolve urgent environmental issues). 33

The current wastewater treatment system serving Edenderry is located at Monasteroris, Edenderry. Edenderry WWTP has a design capacity of 9,800 Population Equivalent (PE), with current (2020) load of 9,644 (PE)<sup>34</sup> and headroom of 156 (PE)<sup>35</sup>. The additional

<sup>33</sup> https://www.epa.ie/publications/compliance--enforcement/waste-water/priority-areas-list-current.php

headroom increased up to 12,500 (PE) will be available upon completion of upgrade works (post 2024).<sup>36</sup> The WWTP is currently fully compliant with the Emission Discharge Values (ELVs).<sup>37</sup>

#### 4.11.8.3 Water Supply

Irish Water is responsible for providing and maintaining adequate public water supply infrastructure throughout County Offaly.

The water supply in Edenderry is from a number of sources. Three boreholes provide water in the town. Two of these boreholes are located close to the water tower in Blundell Park and one is in close proximity to the Kishawanny Bridge. The town water supply is also supplemented by a connection to the Tubberdaly Public Water Scheme.<sup>38</sup> Edenderry's drinking water is treated by Edenderry Public Water Supply Scheme (PWSS). The Edenderry PWSS produces approximately 2,113 m<sup>3</sup>/day of water serving a population of 7,626.

The Irish Water 10-Year Water Supply Capacity Register (March 2022) notes that capacity constraints exist and that connection applications will be assessed on an individual basis considering their specific demand requirements. A Level of Service improvement is required to meet 2031 population targets. Improvement proposals will include but will not be limited to leakage reduction and/or capital investment. Such proposals will be developed and prioritised through Irish Water's National Water Resources Plan and Irish Water's investment planning process.<sup>39</sup>

Under Section 58 of the Environmental Protection Agency Act 1992, the EPA is required to collect and verify monitoring

<sup>&</sup>lt;sup>34</sup> Irish Water for Offaly County Council (March 2022), Settlements with Waste Water Discharge Authorisations -Wastewater Treatment Capacity Register: Wastewater load arising from the settlement(s) being served entering the WWTP in 2020.

<sup>&</sup>lt;sup>35</sup> Irish Water for Offaly County Council (March 2022), Settlements with Waste Water Discharge Authorisations -

Wastewater Treatment Capacity Register: Spare capacity available.

<sup>&</sup>lt;sup>36</sup> Irish Water for Offaly County Council (March 2022), Settlements with Waste Water Discharge Authorisations - Wastewater Treatment Capacity Register: This is the current forecasted completion year as of date of this table and is subject to change. 'Post 2024' indicates that the project is proposed to be completed within the next investment period (2025-2029), subject to the planning and approval of the next capital investment plan. Note, there is no guarantee that this capacity will be delivered if the current Investment Plan is amended due to emerging needs or changes due to exchequer funding.

<sup>&</sup>lt;sup>37</sup> Irish Water, Annual Environmental Reports 2021: https://www.water.ie/docs/aers/2021/D0110-01\_2021\_AER.pdf

<sup>38</sup> Draft Edenderry LAP 2023-2029

<sup>&</sup>lt;sup>39</sup> Draft Edenderry LAP 2023-2029

results for all water supplies in Ireland covered by the European Communities (Drinking Water) Regulations, 2000. The EPA publishes their results in annual reports that are supported by Remedial Action Lists (RALs). The RAL identifies water supplies that are not in compliance with the Regulations mentioned above.

The most recent EPA Remedial Action List (Q2 of 2022) does not include any water scheme that supplies the Plan area.

#### 4.11.8.4 Surface Water Drainage

Offaly County Council is responsible for surface water drainage in the Plan area. Sustainable urban Drainage systems (SuDS) is a method to minimise the quantity and increase the quality of surface water runoff and to mitigate adverse impacts of climate change. SuDS can also provide amenity and biodiversity benefits. The Council seeks to ensure the sustainable management of surface water discharges in urban areas through the use of SuDS.

## 4.11.9 Waste Management

Waste management within the Plan area is guided by the Eastern-Midlands Region Waste Management Plan 2015-2021. The Plan provides a framework for the prevention and management of waste in a sustainable manner in 10 local authority areas, including Offaly County Council.

In accordance with Section 22(7)(h) of the Waste Management Act 1996 (as amended), historic landfill sites have been identified for the purpose of identifying what, if any, remedial measures are required to be carried out at the sites. The Eastern-Midlands Regional Waste Management Plan 2015-2021 lists sites in County Offaly, including Cloncannon (Edenderry) and a site adjacent to Cloncannon.

# 4.11.10 Existing Problems

The provisions of the Plan will contribute towards protection of the environment with regard to impacts arising from material assets.

The provisions of infrastructure and supporting services for development, particularly water and wastewater services, is critical.



Figure 4.16 Mineral Localities

# 4.12 Cultural Heritage

## 4.12.1 Archaeological Heritage

Archaeology is the study of past societies through the material remains left by those evidence of societies and the their Archaeological environment. sites monuments vary greatly in form and date; examples include earthworks of different types and periods, (e.g. early historic ringforts and prehistoric burial mounds), megalithic tombs the Prehistoric period, medieval buildings, urban archaeological deposits and underwater features.

Archaeological heritage is protected under the National Monuments Acts (1930-2004), Natural Cultural Institutions Act 1997 and the Planning Acts.

The Record of Monuments and Places (RMP) is an inventory, put on a statutory basis by amendment to the National Monuments Act 1994, of sites and areas of archaeological significance, numbered and mapped. It is available from the National Monuments Service and at archaeology.ie.

The term 'monument' includes all man-made structures of whatever form or date except buildings habitually used for ecclesiastical purposes. All monuments in existence before 1700 A.D. are automatically considered to be historic monuments within the meaning of the Acts. Monuments of architectural and historical interest also come within the scope of the Acts. Monuments include: any artificial or partly artificial building, structure or erection or group of such buildings, structures or erections; any cave, stone or other natural product, whether or not forming part of the ground, that has been artificially carved, sculptured or worked upon or which (where it does not form part of the place where it is) appears to have been purposely put or arranged in position; any, or any part of any, prehistoric or ancient tomb, grave or burial deposit, or, ritual, industrial or habitation site; and any place comprising the remains or traces of any such building, structure or erection, any such cave, stone or natural product or any such tomb, grave, burial deposit or ritual, industrial or habitation site, situated on land or in the territorial waters of the State', but excludes 'any building or part of any building, that is habitually used for ecclesiastical purposes' (National Monuments Acts 1930-2004). A recorded monument is a monument included in the list and marked on the map which comprises the RMP set out county by county under Section 12 of the National Monuments (Amendment) Act, 1994 by the Archaeological Survey of Ireland. The definition includes Zones of Notification within which requirements for notifications of proposed works apply.

There are numerous Zones of Archaeological Potential identified within Edenderry<sup>40</sup>, with various entries to the Sites and Monuments Record (SMR) and Record of Monuments and Places (RMP) in the historic town centre of Edenderry.

Figure 4.17 shows the spatial distribution of recorded monuments within and beyond the Plan area. Clusters of monuments are located within the centre of the Plan area and within the town's hinterland. Entries to the RMP within and around Edenderry, include: sheelana-gig; silver mine; tower house; font; enclosure; and a rath.

Underwater Archaeology Unit established within the National Monuments Service to manage and protect Ireland's underwater cultural heritage, including the quantification of the underwater resource and assessing development impacts in order to manage and protect this aspect of Ireland's The Shipwreck Inventory principally a desktop survey with information gathered from a broad range of cartographic, archaeological and historical sources, both documentary and pictorial. Wrecks over 100 years old and archaeological objects found underwater are protected under the National Monuments (Amendment) Acts 1987 and 1994. Significant wrecks less than 100 years old can be designated by Underwater Heritage account of their on historical, archaeological or artistic importance. Such Orders can also be used to designate areas of seabed or land covered by water to more clearly define and protect wreck sites and archaeological objects. Under the legislation all diving on known protected wreck sites or with the intention of searching for underwater cultural heritage is subject to licensing requirements.

<sup>&</sup>lt;sup>40</sup> Draft Edenderry LAP 2023-2029

Rivers within the Plan area may contain many features and finds associated with riverine heritage such as shipwrecks, piers, quay walls, fords, stepping stones and associated archaeological objects and features.

## 4.12.2 Architectural Heritage

The term architectural heritage is defined in the Architectural Heritage (National Inventory) and Historic Monuments Act 1999 as meaning all: structures and buildings together with their settings and attendant grounds, fixtures and fittings; groups of structures and buildings; and, sites which are of technical, historical, archaeological, artistic, cultural, scientific, social, or technical interest.

Records of Protected Structures are legislated for under Section 12 and Section 51 of the Planning and Development Act 2000 as amended. Protected structures are defined in the Planning and Development Act 2000 as amended as structures, or parts of structures that are of special interest from an architectural, historical, archaeological, artistic, cultural, scientific, social or technical point of view.

In relation to a protected structure or proposed protected structure, the following are encompassed:

- The interior of the structure;
- The land lying within the curtilage<sup>41</sup> of the structure:
- Any other structures lying within that curtilage and their interiors; and,
- All fixtures and features that form part of the interior or exterior of any structure or structures referred to in subparagraph (i) or (iii).

The town centre of Edenderry is concentrated around the long linear historical core running east to west from O'Connell Square, a large square dominated by the Town Hall civic building, to an area at the Grand Canal Harbour.<sup>42</sup> Similar to the general spatial spread of archaeological heritage, clusters of

<sup>41</sup> Curtilage is normally taken to be the parcel of ground immediately associated with the Protected Structure, or in use for the purposes of the structure. Protection extends to the buildings and land lying within the curtilage. While the curtilage sometimes coincides with the present property boundary, it can originally have included lands, features or even buildings now in separate ownership, e.g. the lodge of a former country house, or the garden features located in land subsequently sold off. Such lands are described as being attendant grounds, and the protection extends to them just as if they were still within

the curtilage of the Protected Structure.

architectural heritage are indicated within the town's centre and the JKL Street, as shown on Figure 4.18.

Edenderry has a strong Georgian influence because with unique and largely intact architectural character and setting, characterised by a compact historic core and a defined square. It contains many fine buildings and terraces dating from the 18th and 19th Centuries.<sup>43</sup>

There are various Protected Structures within and surrounding the Plan area, including: railway stations; castles; churches; cemeteries; schools; and notable buildings such as Blundell Castle and Town Hall on Market Square. Many of these Protected Structures are located within central parts of Edenderry town and particularly on JKL Street. The Grand Canal and its Harbour are important elements of Edenderry's heritage and historic transportation infrastructure, currently serving mainly as natural and recreational amenity.

The National Inventory of Architectural Heritage (NIAH) is a State initiative under the administration of the Department of Culture. Heritage and the Gaeltacht and established on a statutory basis under the provisions of the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999. The purpose of the NIAH is to identify, record, and evaluate the post-1700 architectural heritage of Ireland, uniformly and consistently as an aid in the protection and conservation of the built heritage. NIAH surveys provide the basis for the recommendations of the Minister of Culture, Heritage and the Gaeltacht to the local authorities for the inclusion of particular structures in their Record of Protected Structures. The NIAH includes historic gardens and designed landscapes. Figure 4.18 shows entries to NIAH in the Plan area.

# 4.12.3 Existing Problems

The context of archaeological and architectural heritage has changed over time however no existing conflicts with legislative objectives governing archaeological and architectural heritage have been identified.

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<sup>&</sup>lt;sup>42</sup> Draft Edenderry LAP 2023-2029

<sup>&</sup>lt;sup>43</sup> Draft Edenderry LAP 2023-2029



Figure 4.17 Archaeological Heritage



Figure 4.18 Architectural Heritage

# 4.13 Landscape

#### 4.13.1 Introduction

Article 1 (a) of the European Landscape Convention provides a definition of landscape as follows; "Landscape means an area, as perceived by people whose character is the result of the action and interaction of natural/or human factors". The importance of landscape and visual amenity and the role of its protection are recognised in the Planning and Development Act 2000 as amended, which requires that Development Plans include objectives for the preservation of the landscape, views and the amenities of places and features of natural beauty.

Edenderry is situated close to the source of the River Boyne (which runs to the west and north-west of the town) and Grand Canal to the south of the town (which runs in east to west direction). The Grand Canal is one of Edenderry's prime amenity assets providing regional connections and an important wildlife and biodiversity corridor. The Edenderry Branch of the Grand Canal extends a short distance in a north-easterly direction right into the heart of the Town Centre. The amenities of the town include the built environment's historical streetscape and the riverside character of the Grand Canal and the River Boyne. Most of the area surrounding Edenderry consists of agricultural and pasture lands, with coniferous and mixed forests in the south-east of the Plan area and some peatland areas adjacent to the Grand Canal in the

# 4.13.2 Landscape Character Assessment

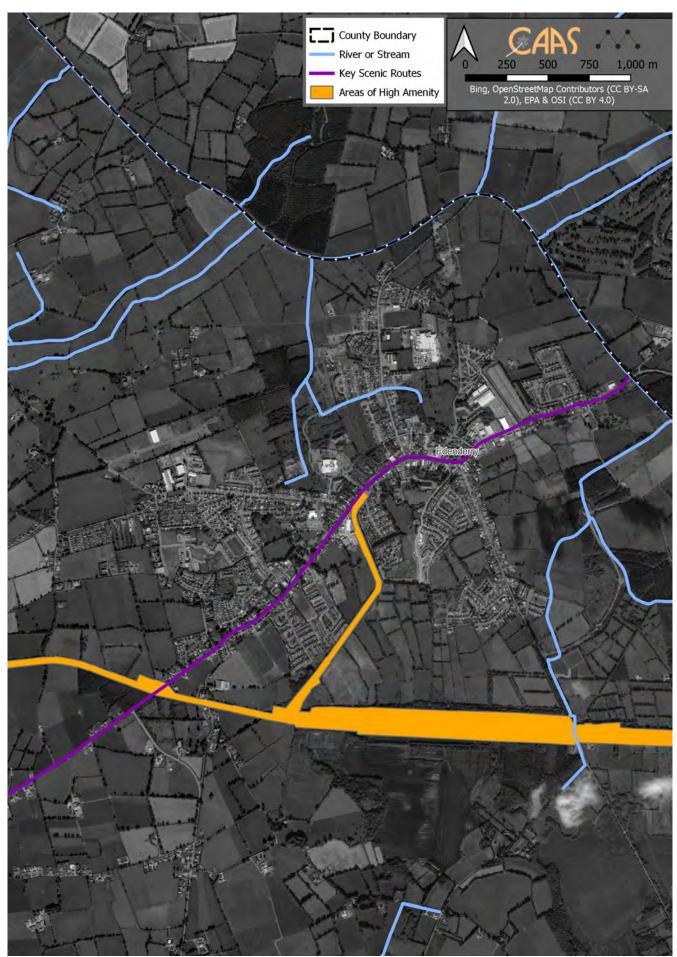
The European Landscape Convention was ratified in Ireland in 2002, this required EU Member States to adopt national measures to promote landscape, planning, protection and management. The purpose of landscape character assessment is to provide the foundation for policy formulation and decision making for landscape management.

There are a range of different landscapes found in the Plan area, each with varying visual and amenity values, topography, exposure levels and contain a variety of habitats. Each landscape type has varying capacity to absorb development related to its overall sensitivity. The Offaly Development Plan 2021-2027 identifies ten Landscape Character Areas, Areas of High Amenity and Key Amenity Routes and several views and prospects within the Council's administrative area. The Grand Canal Corridor to the south of the Plan area is regarded as an Area of High Amenity. There is also a Scenic Route intersecting central parts of Edenderry. Relevant landscape designations within the Plan area are mapped on Figure 4.19.

A landscape's capacity to absorb new development, without exhibiting a significant alteration of character or change of appearance is referred to as it's 'sensitivity'. The sensitivity of the landscapes of County Offaly varies and is thereby classified within the following sensitivity classes: low; medium; and high. Edenderry and adjacent areas are mainly classified as being of 'Low' and 'Moderate' landscape sensitivity. The Grand Canal Corridor partially within and adjacent to the south of the town is classified as being of 'High Sensitivity', as shown on Figure 4.20. These areas are vulnerable landscapes with extremely low capacity to absorb new development.

# 4.13.3 Existing Environmental Problems

New developments have resulted in changes to the visual appearance of lands within the Plan area however legislative objectives governing landscape and visual appearance were not identified as being conflicted with.



**Figure 4.19 Landscape Designations** 

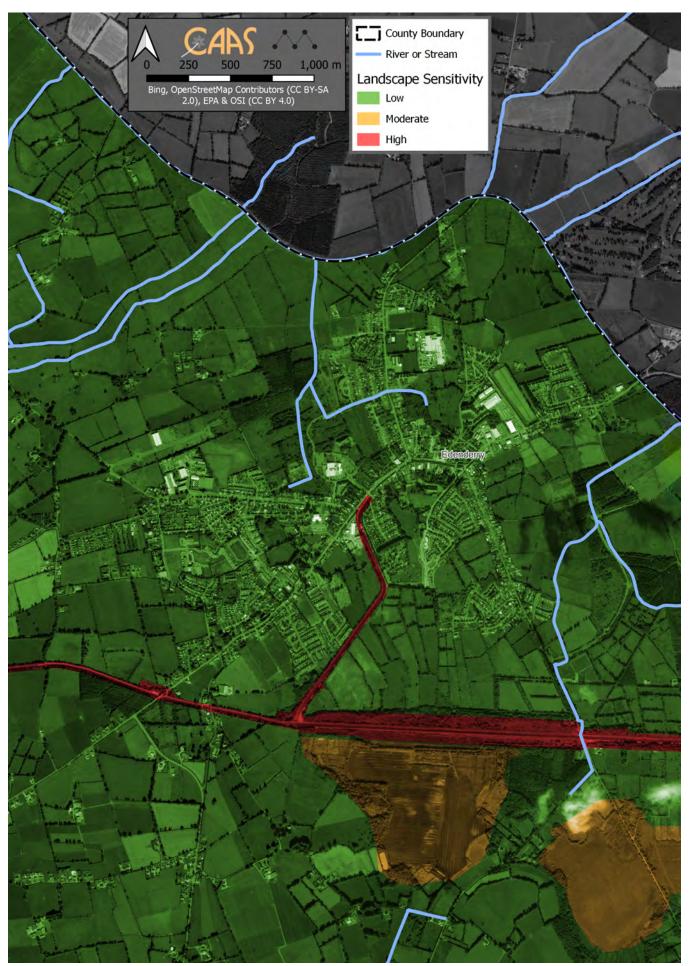


Figure 4.20 Landscape Sensitivity

# Section 5 Strategic Environmental Objectives

Strategic Environmental Objectives (SEOs) are methodological measures developed from policies that generally govern environmental protection objectives established at international, Community or Member State level e.g. the environmental protection objectives of various European Directives that have been transposed into Irish law and which are required to be implemented.

The SEOs are set out under a range of topics and are used as standards against which the provisions of the Plan and the alternatives are evaluated in order to help identify which provisions would be likely to result in significant environmental effects and where such effects would be likely to occur, if – in the case of adverse effects – unmitigated.

The SEOs are linked to indicators which can facilitate monitoring the environmental effects of the Plan as well as identifying targets which the Plan can help work towards.

All SEOs, indicators and targets are provided on Table 5.1 overleaf.

Further detail on legislation, plans and programmes are provided under Section 2 (and associated Appendix I "Relationship with Legislation and Other Policies, Plans, and Programmes") and Section 4.

Given the position of the Local Area Plan in the land use planning hierarchy beneath the Offaly County Development Plan 2021-2027, the measures identified in that County Development Plan SEA have been used as they are or having been slightly modified – in most instances. This consistency across the hierarchy of land use plans will improve the efficiency and effectiveness of future monitoring.

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Table 5.1 Strategic Environmental Objectives (SEOs), Indicators and Targets

Environmental	ie 5.1 Strategic Environmental Objectives (SEOS), Indicators and Targets  vironmental SEO Guiding Strategic Environmental Objectives Indicators T		Targets		
Component	Code	Principle			
Biodiversity, Flora and Fauna	BFF	No net contribution to biodiversity losses or deterioration	<ul> <li>To preserve, protect, maintain and, where appropriate, enhance the terrestrial, aquatic and soil biodiversity, particularly EU designated sites and protected species</li> <li>Ensure no adverse effects on the integrity of any European site, with regard to its qualifying interests, associated conservation status, structure and function</li> <li>Safeguard national, regional and local designated sites and supporting features which function as stepping stones for migration, dispersal and genetic exchange of wild species</li> <li>Enhance biodiversity in line with the National Biodiversity Strategy and its targets</li> <li>To protect, maintain and conserve natural capital</li> </ul>	<ul> <li>Condition of European sites</li> <li>Number of spatial plans that have included ecosystem services content, mapping and policy to protect ecosystem services when their relevant plans are either revised or drafted</li> <li>SEA and AA as relevant for new Council policies, plans, programmes etc.</li> <li>Status of water quality in the County's water bodies</li> <li>Compliance of planning permissions with Plan measures providing for the protection of Biodiversity and flora and fauna – see County Development Plan Chapter 4 "Biodiversity and Landscape" and Local Area Plan Chapter 6 "Biodiversity and Green Infrastructure"</li> </ul>	<ul> <li>Require all local level land use plans to include ecosystem services and green/blue infrastructure provisions in their land use plans and as a minimum, to have regard to the required targets in relation to the conservation of European sites, other nature conservation sites, ecological networks, and protected species</li> <li>Implement and review, as relevant, the Biodiversity Plan for Offaly as incorporated into the Offaly Heritage Plan 2017-21</li> <li>For planning permission to be only granted when applications demonstrate that they comply with all Plan measures providing for the protection of biodiversity and flora and fauna – see County Development Plan Chapter 4 "Biodiversity and Landscape" and Local Area Plan Chapter 6 "Biodiversity and Green Infrastructure"</li> </ul>
Population and Human Health	РНН	Improve quality of life for all ages and abilities based on high-quality, serviced, well connected and sustainable residential, working, educational and recreational environments	<ul> <li>Promote economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management</li> <li>Ensure that existing population and planned growth is matched with the required public infrastructure and the required services</li> <li>Safeguard citizens from environment-related pressures and risks to health and well-being</li> </ul>	Implementation of Plan measures relating to the promotion of economic growth as provided for by County Development Plan Chapter 5 "Economic Development Strategy" and Local Area Plan Chapter 2 "Economic Development Strategy"  Number of spatial concentrations of health problems arising from environmental factors resulting from development permitted under the Plan Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures  Number of spatial plans that include specific green infrastructure mapping	<ul> <li>For review of progress on implementing Plan objectives to demonstrate successful implementation of measures relating to the promotion of economic growth as provided for by County Development Plan Chapter 5 "Economic Development Strategy" and Local Area Plan Chapter 2 "Economic Development Strategy"</li> <li>No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan</li> <li>Increase in the proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures.</li> <li>Implementation of Green Infrastructure</li> </ul>
Soil (and Land)	S	Ensure the long-term sustainable management of land	Protect soils against pollution, and prevent degradation of the soil resource Promote the sustainable use of infill and brownfield sites over the use of greenfield sites Safeguard areas of prime agricultural land and designated geological sites	Proportion of population growth occurring on infill and brownfield lands compared to greenfield Volume of contaminated material generated from brownfield and infill Number of AA determinations and environmental assessments undertaken to support applications for brownfield and infill development prior to planning permission	<ul> <li>Maintain built surface cover nationally to below the EU average of 4% as per the NPF.</li> <li>Achieve the 40% target for growth on infill as per the NPF.</li> </ul>

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Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives	Indicators	Targets
Water	W	Protection, improvement and sustainable management of the water resource	Ensure that the status of water bodies is protected, maintained and improved in line with the requirements of the Water Framework Directive     Ensure water resources are sustainably managed to deliver proposed regional and County growth targets in the context of existing and projected water supply and waste water capacity constraints ensuring the protection of receiving environments     Avoid inappropriate zoning and development in areas at risk of flooding and areas that are vulnerable to current and future erosion     Integrate sustainable water management solutions (such as SuDS, porous surfacing and green roofs) into development proposals	Status of water bodies as reported by the EPA Water Monitoring Programme for the WFD     Number of incompatible developments permitted within flood risk areas	<ul> <li>Not to cause deterioration in the status of any surface water or affect the ability of any surface water to achieve 'good status'</li> <li>Implementation of the objectives of the second cycle of the River Basin Management Plan (and subsequent iterations as relevant)</li> <li>Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk</li> </ul>
Material Assets	MA	Sustainable and efficient use of natural resources	Optimise existing infrastructure and provide new infrastructure to match population distribution proposals  Ensure access to affordable, reliable, sustainable and modern energy for all which encourages a broad energy generation mix to ensure security of supply  Promote the circular economy, reduce waste, and increase energy efficiencies  Ensure there is adequate sewerage and drainage infrastructure in place to support new development  Reduce the energy demand from the transport sector and support moves to electrification of road and rail transport modes  Encourage the transition to a zero-carbon economy by facilitating the development of a grid infrastructure to support renewables and international connectivity. Reduce the average energy consumption per capita including promoting energy efficient buildings, retrofitting, smart- buildings, cities and grids	Programmed delivery of Irish Water infrastructure for all key growth towns in line with Irish Water Investment Plan and prioritisation programme to ensure sustainable growth can be accommodated     Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the Plan     Proportion of population within who report regular cycling / walking to school and work above 2016 CSO figures	<ul> <li>To map brownfield and infill land parcels across the County.</li> <li>All new developments granted permission to be connected to and adequately and appropriately served by waste water treatment over the lifetime of the Plan</li> <li>Where septic tanks are proposed, for planning permission to be only granted when applications demonstrate that the outfall from the septic tank will not – in-combination with other septic tanks– contribute towards any surface or ground water body not meeting the objective of good status under the Water Framework Directive</li> <li>Increased budget spends on water and waste water infrastructure</li> <li>By 2020 all citizens will have access to speeds of 30Mbps, and that 50% of citizens will be subscribing to speeds of 100Mbps</li> </ul>
Air	A	Support clean air policies that reduce the impact of air pollution on the environment and public health	To avoid, prevent or reduce harmful effects on human health and the environment as a whole resulting from emissions to air from all sectors with particular reference to emissions from transport, residential heating, industry and agriculture.  Maintain and promote continuing improvement in air quality through the reduction of emissions and promotion of renewable energy and energy efficiency.  Promote continuing improvement in air	<ul> <li>Proportion of journeys made by private fossil fuel-based car compared to 2016 National Travel Survey levels of 74%</li> <li>NO<sub>x</sub>, SO<sub>x</sub>, PM10 and PM2.5 as part of Ambient Air Quality Monitoring</li> </ul>	<ul> <li>Decrease in proportion of journeys made by private fossil fuel-based car compared to 2016 National Travel Survey levels.</li> <li>Improvement in Air Quality trends, particularly in relation to transport related emissions of NO<sub>x</sub> and particulate matter</li> </ul>

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Environmental	Environmental SEO Guiding Strat		SEA Environmental Report for the Draft Edenderry Local Area Plan 2023-2029  Strategic Environmental Objectives Indicators		Targets		
Component	Code	Principle					
			<ul> <li>quality.</li> <li>Reduction of emissions of sulphur dioxide, nitrogen oxides, volatile organic compounds, ammonia and fine particulate matter which are responsible for acidification, eutrophication and ground-level ozone pollution</li> <li>Meet Air Quality Directive standards for the protection of human health — Air Quality Directive</li> <li>Significantly decrease noise pollution by 2020 and move closer to WHO recommended levels.</li> </ul>				
Climatic Factors <sup>44</sup>	С	Achieving transition to a competitive, low carbon, climate-resilient economy that is cognisant of environmental impacts	<ul> <li>To minimise emissions of greenhouse gasses.</li> <li>Integrate sustainable design solutions into infrastructure (e.g. energy efficient buildings; green infrastructure).</li> <li>Contribute towards the reduction of greenhouse gas emissions in line with national targets.</li> <li>Promote development resilient to the effects of climate change</li> <li>Promote the use of renewable energy, energy efficient development and increased use of public transport</li> </ul>	<ul> <li>Implementation of Plan measures relating to climate reduction targets as provided for by Plan provisions including those provided for and referenced in County Development Plan Chapter 3 "Climate Action and Energy" and Local Area Plan Chapter 8 "Climate Action"</li> <li>Proportion of journeys made by private fossil fuel-based car compared to 2016 levels</li> <li>Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures</li> </ul>	<ul> <li>For review of progress on implementing Plan objectives to demonstrate successful implementation of measures climate reduction targets as provided for by Plan provisions including those provided for and referenced in County Development Plan Chapter 3 "Climate Action and Energy" and Local Area Plan Chapter 8 "Climate Action"</li> <li>Increase in the proportion of people resident in the County reporting regular cycling / walking to school and work above 2016 CSO figures</li> <li>Decrease in the proportion of journeys made by residents of the County using private fossil fuel-based car compared to 2016 levels</li> <li>Contribute towards transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050</li> <li>Contribute towards the target of the Renewable Energy Directive (2009/28/EC), for all Member States to reach a 10% share of renewable energy in transport by 2020</li> <li>Contribute towards the target of aggregate reduction in carbon dioxide (CO<sub>2</sub>) emissions of at least 80% (compared to 1990 levels) by 2050 across the electricity generation, built environment and transport sectors</li> <li>To promote reduced energy consumption and support the uptake of renewable options and a move away from solid fuels for residential heating</li> </ul>		

<sup>&</sup>lt;sup>44</sup> Please also refer to relevant legislation and requirements under Sections 4.10, 8.5, 8.7.8 and Appendix I. Targets under the national Climate Action Plan are reviewed and updated periodically and include those under the headings of Electricity, Built Environment, Transport, Agriculture, Forestry & Land Use and Enterprise.

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Environmental	SEO	Guiding	Strategic Environmental Objectives	Indicators	Targets
Component	Code	Principle			, s
Cultural Heritage	СН	Safeguard cultural heritage features and their settings through responsible design and positioning of development	Protect places, features, buildings and landscapes of cultural, archaeological or architectural heritage	Percentage of entries to the Record of Monuments and Places, and the context these entries within the surrounding landscape where relevant, protected from adverse effects resulting from development which is granted permission under the Plan     Percentage of entries to the Record of Protected Structures and Architectural Conservation Areas and their context protected from significant adverse effects arising from new development granted permission under the Plan	<ul> <li>Protect entries to the Record of Monuments and Places, and the context of these entries within the surrounding landscape where relevant, from adverse effects resulting from development which is granted permission under the Plan</li> <li>Protect entries to the Record of Protected Structures and Architectural Conservation Areas and their context from significant adverse effects arising from new development granted permission under the Plan</li> </ul>
Landscape	L	Protect and enhance the landscape character	To implement the Plan's framework for identification, assessment, protection, management and planning of landscapes having regard to the European Landscape Convention	<ul> <li>Number of developments permitted which result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in Land Use Plans, resulting from development which is granted permission under the Plan</li> </ul>	<ul> <li>No developments permitted which result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in Land Use Plans, resulting from development which is granted permission under the Plan</li> <li>To seek to align with the National Landscape Strategy</li> </ul>

# **Section 6** Description of Alternatives

### 6.1 Introduction

The SEA Directive requires that reasonable alternatives (taking into account the objectives and the geographical scope of the plan or programme) are identified, described and evaluated for their likely significant effects on the environment.

Alternatives for the Plan are identified under a number of types below and assessed in Section 7.

#### 6.2 Limitations in Available Alternatives

The Plan is required to be prepared by the existing, already in force, Offaly County Development Plan 2021-2027 and the Planning and Development Act 2000 (as amended), which specifies various types of objectives that must be provided for by the Plan.

The alternatives available for the Plan are significantly limited by the provisions of higher-level planning objectives, including those of the National Planning Framework (NPF), the Regional Spatial and Economic Strategy (RSES) for the Eastern and Midland Region and the County Plan. These documents set out various requirements for the content of the Plan including on topics such as land use zoning and the sustainable development of settlements.

# 6.3 Type 1: Alternatives Already Considered

The preparation of the County Development Plan and associated SEA process already considered various different types of alternatives, including those relating to population allocations, which were integrated into that Plan and which set requirements for lower tier planning in the County, including the Edenderry Local Area Plan.

# 6.4 Type 2: Land Use Zoning Alternatives

Offaly County Council in preparing a Draft Plan for public display for Edenderry developed the following alternatives for land use zoning in Edenderry (there are various alternative components under each heading):

#### Type 2 (i): "More Compact Development"

- Edenderry to reach population allocation, resulting in balanced orderly development and implementation of the core strategy as contained in Chapter 2 of the Offaly County Development Plan 2021-2027.
- This alternative involves preparing the Plan using a Serviced/Serviceable Land and Infrastructure Assessment approach. Methodologies for this approach are set out in higher level documents, including the National Planning Framework and the 2013 Local Area Plan Guidelines for Planning Authorities.
- The infrastructure required to be in place to achieve the growth targets is already in place or planned.
- Residential Development to take place on New Residential and Existing Residential (infill etc.) lands over the lifetime of the Plan.
- The Core Retail Area is more compact under this scenario.
- Business/Employment would occur in the periphery close to existing infrastructure.
- Community development facilities to be developed in tandem with economic and residential growth.
- Town Centre developments would be developed in a planned and coordinated manner focused within the town centre.

• Opportunity sites identified with clear design and proposed uses identified.

#### Type 2 (ii): "Less Compact Development"

- Edenderry to reach population allocation, resulting in balanced orderly development and implementation of the core strategy as contained in Chapter 2 of the Offaly County Development Plan 2021-2027.
- This alternative involves preparing the Plan while not using the Serviced Land and Infrastructure Assessment approach.
- Additional infrastructure would be required to accommodate sporadic development, more than would be required for Alternative 1 'More Compact Development' and some development may have to be serviced by private waste water treatment systems which would have to be properly maintained.
- Residential Development to take place on New Residential, Existing Residential and certain peripheral, outer fringe lands (beyond the existing development envelope) over the lifetime of the Plan.
- The Core Retail Area is less compact under this scenario.
- Business/Employment would occur at locations including those close to residential development.
- Creation of commercial/social centres throughout the Plan area and associated dispersal of Town Centre, commercial development and local services.
- Town centre development would be sporadic and uncoordinated around the Town centre zonings.
- Opportunity sites are identified but no clear guidance on the design parameters or uses identified.

# 6.5 Type 3: Local Transport Plan Alternatives

#### Type 3 (i) Low Carbon Corridor

- A. Support the use of a low carbon Edenderry-Enfield rail-line corridor within the Plan boundary.
- B. Do not explicitly support the use of a low carbon Edenderry-Enfield rail-line corridor within the Plan boundary, making its redundant state more likely.

#### Type 3 (ii) Roadspace Capacity

- A. To accompany the development of additional roadspace capacity by a corresponding reallocation of roadspace within Edenderry to walking, cycling and public transport.
- B. To not accompany the development of additional roadspace capacity by a corresponding reallocation of roadspace within Edenderry to walking, cycling and public transport.

#### Type 3 (iii) How to provide transport infrastructure

- A. Provide new transport infrastructure with all additional environmental mitigation left to be defined until project level.
- B. Provide new transport infrastructure, subject to environmental constraints, including those related to habitats and potential impacts such as disturbance from lighting includes minimising river crossings, avoiding sensitive habitats, not increasing barriers to flood waters and sustainable design and construction techniques

#### **Evaluation of Alternatives** Section 7

#### 7.1 Introduction

This section provides a comparative evaluation of the likely significant environmental effects<sup>45</sup> of implementing available alternatives that are described in Section 6. This determination sought to understand whether each alternative was likely to improve conflict with or have a neutral interaction with the receiving environment.

#### 7.2 Methodology

The relevant aspects of the current state of the environment (see Section 4) and the Strategic Environmental Objectives (see Section 5 and Table 7.1) are used in the assessment of alternatives.

The alternatives are evaluated using compatibility criteria (see Table 7.2 below) in order to determine how they would be likely to affect the status of the existing environment and the SEOs. The SEOs and the alternatives are arrayed against each other in order to demonstrate which interactions would cause effects on specific components of the environment. Where the appraisal identifies an interaction with the status of an SEO the relevant SEO code is entered into the relevant column.

The interactions identified are reflective of likely significant environmental effects:

- Interactions that would be likely to improve the status of a particular SEO would be likely to contribute towards a significant positive effect on the environmental component to which the SEO relates, including in-combination with the existing statutory planning/decision-making and consent-granting framework.
- Interactions that would potentially conflict with the status of an SEO and would be likely to be mitigated would be likely to result in potential significant negative effects; however, these effects could be mitigated by integrating measures into the Plan.
- Interactions that would probably conflict with the status of an SEO and would be unlikely to be mitigated would be likely to result in a significant residual negative effect on the environmental component to which the SEO relates.

Effects considered include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects.

The degree of significance of effects occurring cannot be fully determined at this level of decision making due to the lack of exact detail available with regard to the type or scale of development that will be permitted under the Plan. However, a strategic assessment can be undertaken.

Table 7.1 Strategic Environmental Objectives<sup>46</sup>

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives		
Biodiversity, Flora and Fauna	BFF	No net contribution to biodiversity losses or deterioration	<ul> <li>To preserve, protect, maintain and, where appropriate, enhance the terrestrial, aquatic and soil biodiversity, particularly EU designated sites and protected species</li> <li>Ensure no adverse effects on the integrity of any European site, with regard to its qualifying interests, associated conservation status, structure and function</li> <li>Safeguard national, regional and local designated sites and supporting features which function as stepping stones for migration, dispersal and genetic exchange of wild species</li> <li>Enhance biodiversity in line with the National Biodiversity Strategy and its targets</li> <li>To protect, maintain and conserve natural capital</li> </ul>		
Population and Human Health	РНН	Improve quality of life for all ages and abilities based on high-quality, serviced, well connected and sustainable residential, working, educational and recreational environments	<ul> <li>Promote economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management</li> <li>Ensure that existing population and planned growth is matched with the required public infrastructure and the required services</li> <li>Safeguard citizens from environment-related pressures and risks to health and well-being</li> </ul>		

<sup>&</sup>lt;sup>45</sup> These effects include secondary, cumulative (see also Section 8.2), synergistic, short, medium and long-term permanent and temporary, positive and negative effects.

46 See also Section 5

Environmental	SEO	Guiding Principle	Strategic Environmental Objectives
Component	Code	_	
Soil (and Land)	S	Ensure the long-term sustainable management of land	<ul> <li>Protect soils against pollution, and prevent degradation of the soil resource</li> <li>Promote the sustainable use of infill and brownfield sites over the use of greenfield sites</li> <li>Safeguard areas of prime agricultural land and designated geological sites</li> </ul>
Water	W	Protection, improvement and sustainable management of the water resource	<ul> <li>Ensure that the status of water bodies is protected, maintained and improved in line with the requirements of the Water Framework Directive</li> <li>Ensure water resources are sustainably managed to deliver proposed regional and County growth targets in the context of existing and projected water supply and waste water capacity constraints ensuring the protection of receiving environments</li> <li>Avoid inappropriate zoning and development in areas at risk of flooding and areas that are vulnerable to current and future erosion</li> <li>Integrate sustainable water management solutions (such as SuDS, porous surfacing and green roofs) into development proposals</li> </ul>
Material Assets	МА	Sustainable and efficient use of natural resources	<ul> <li>Optimise existing infrastructure and provide new infrastructure to match population distribution proposals</li> <li>Ensure access to affordable, reliable, sustainable and modern energy for all which encourages a broad energy generation mix to ensure security of supply</li> <li>Promote the circular economy, reduce waste, and increase energy efficiencies</li> <li>Ensure there is adequate sewerage and drainage infrastructure in place to support new development</li> <li>Reduce the energy demand from the transport sector and support moves to electrification of road and rail transport modes</li> <li>Encourage the transition to a zero-carbon economy by facilitating the development of a grid infrastructure to support renewables and international connectivity. Reduce the average energy consumption per capita including promoting energy efficient buildings, retrofitting, smart- buildings, cities and grids</li> </ul>
Air	A	Support clean air policies that reduce the impact of air pollution on the environment and public health	<ul> <li>To avoid, prevent or reduce harmful effects on human health and the environment as a whole resulting from emissions to air from all sectors with particular reference to emissions from transport, residential heating, industry and agriculture.</li> <li>Maintain and promote continuing improvement in air quality through the reduction of emissions and promotion of renewable energy and energy efficiency.</li> <li>Promote continuing improvement in air quality.</li> <li>Reduction of emissions of sulphur dioxide, nitrogen oxides, volatile organic compounds, ammonia and fine particulate matter which are responsible for acidification, eutrophication and ground-level ozone pollution</li> <li>Meet Air Quality Directive standards for the protection of human health — Air Quality Directive</li> <li>Significantly decrease noise pollution by 2020 and move closer to WHO recommended levels.</li> </ul>
Climatic Factors <sup>47</sup>	С	Achieving transition to a competitive, low carbon, climate- resilient economy that is cognisant of environmental impacts	<ul> <li>To minimise emissions of greenhouse gasses.</li> <li>Integrate sustainable design solutions into infrastructure (e.g. energy efficient buildings; green infrastructure).</li> <li>Contribute towards the reduction of greenhouse gas emissions in line with national targets.</li> <li>Promote development resilient to the effects of climate change</li> <li>Promote the use of renewable energy, energy efficient development and increased use of public transport</li> </ul>
Cultural Heritage	СН	Safeguard cultural heritage features and their settings through responsible design and positioning of development	Protect places, features, buildings and landscapes of cultural, archaeological or architectural heritage
Landscape	L	Protect and enhance the landscape character	<ul> <li>To implement the Plan's framework for identification, assessment, protection, management and planning of landscapes having regard to the European Landscape Convention</li> </ul>

# Table 7.2 Criteria for appraising the effect of the Alternatives on SEOs

Likely to <b>Improve</b> status of SEOs	Potential <b>Conflict</b> with status of SEOs -	Probable	No Likely
	likely to be mitigated	<u>Conflict</u> with	interaction
		status of SEOs -	with status of
		unlikely to be	SEOs
		mitigated	
+	-	-	0

<sup>&</sup>lt;sup>47</sup> Please also refer to relevant legislation and requirements under Sections 4.10, 8.5, 8.7.8 and Appendix I. Targets under the national Climate Action Plan are reviewed and updated periodically and include those under the headings of Electricity, Built Environment, Transport, Agriculture, Forestry & Land Use and Enterprise.

# 7.3 Detailed Assessment of Alternatives

# 7.3.1 Effects Common to all Alternatives

Each of the alternatives envisage – in compliance with the robust policy framework in place at national, regional and county level – sustainable development and compact growth in the Plan area. As such, various potential environmental effects are common to each of the alternatives. The environmental effects detailed on would be present, some to varying degrees, under the different alternatives.

**Table 7.3 Effects Common to All Alternatives** 

Environmental Component	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated
Biodiversity and Flora and Fauna	<ul> <li>Contribution towards protection of ecology (including designated sites, ecological connectivity, habitats) by facilitating development of lands (including those within and adjacent to the Plan area) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the Plan area and beyond.</li> <li>Sustains existing sustainable rural management practices – and the communities who support them – to ensure the continuation of long-established managed landscapes and the flora and fauna that they contain.</li> </ul>	Arising from both construction and operation of development and associated infrastructure:  • Loss of/damage to biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species, listed species, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna;  • Habitat loss, fragmentation and deterioration, including patch size and edge effects; and  • Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species such as birds (e.g. swifts) and bats.
Population and Human Health	<ul> <li>Promotion of economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management.</li> <li>Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands (including those within and adjacent to the Plan area) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere in the Plan area and beyond</li> <li>Contribution towards the protection of human health by facilitating development of lands (including those within and adjacent to the Plan area) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the Plan area and beyond.</li> </ul>	Potential adverse effects arising from flood events.  Potential interactions if effects arising from environmental vectors.
Soil	Contribution towards the protection of soils (including those used for agriculture) and designated sites of geological heritage by facilitating development of lands (including those within and adjacent to the Plan area) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the Plan area and beyond.	Potential adverse effects on the hydrogeological and ecological function of the soil resource, including as a result of development on contaminated lands.     Potential for riverbank erosion.

Environmental	Significant Positive Effect, likely to occur	Potentially Significant Adverse					
Component	Contribution towards the protection of water by	Environmental Effects, if unmitigated     Potential adverse effects upon the status of					
Water	facilitating development of lands (including those within and adjacent to the Plan area) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the Plan area and beyond.  water bodies and entries Register of Protected Areas (human value), arising from quality, flow and/or morpholo Increase in flood risk and associated with flood events.						
Material Assets	Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands (including those within and adjacent to the Plan area) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere in the Plan area and beyond. Contribution towards limits in increases in energy demand from the transport sector by facilitating sustainable compact growth.	<ul> <li>Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity ensures the mitigation of potential conflicts).</li> <li>Failure to adequately treat surface water run-off that is discharged to water bodies (water services infrastructure and capacity ensures the mitigation of potential conflicts).</li> <li>Failure to comply with drinking water regulations and serve new development with adequate drinking water (water services infrastructure and capacity ensures the mitigation of potential conflicts).</li> <li>Increases in waste levels.</li> <li>Potential impacts upon public assets and infrastructure.</li> <li>Interactions between agricultural waste and soil, water, biodiversity and human health – including as a result of emissions of ammonia from agricultural activities (e.g. manure handling, storage and spreading) and the production of secondary inorganic particulate matter.</li> </ul>					
Air and Climatic Factors	Contribution towards climate mitigation and adaptation by facilitating compact development of lands (including those within and adjacent to the Plan area) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere in the Plan area and beyond.	<ul> <li>Potential conflict between development under the Plan and aiming to reduce carbon emissions in line with local, national and European environmental objectives.</li> <li>Potential conflicts between transport emissions, including those from cars, and air quality.</li> <li>Potential conflicts between increased frequency of noise emissions and protection of sensitive receptors.</li> <li>Potential conflicts with climate adaptation measures including those relating to flood risk management.</li> </ul>					
Cultural Heritage	Contributes towards protection of cultural heritage elsewhere by facilitating development within the Plan area.	Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities.					
Landscape	Contributes towards protection of wider landscape and landscape designations by facilitating development within the Plan area.	Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape.					

# 7.3.2 Assessment of Type 2: Alternatives for Land Use Zoning

### Alternative Type 2 (i): "More Compact Development"

The more compact, serviced/serviceable land and infrastructure assessment approach under this alternative would allow for water supply, waste water, compact growth, public transport and co-ordinated development considerations to be integrated into the Plan to the highest degree.

The infrastructure required to be in place to achieve the growth targets is already in place or planned under this alternative.

The development of the Town Centre and the Core Retail Area would be more compact and sustainable under this scenario and would support the longer-term viability of the settlement.

Opportunity sites identified with clear design and proposed uses identified – making successful applications for the sustainable, compact development of the town more likely.

The approach under Alternative Type 2 (i): "More Compact Development" would benefit the protection of various environmental components. Although potentially adverse effects associated with land use development would exist, they would be mitigated to a significant degree.

# Alternative Type 2 (ii): "Less Compact Development"

By not following a more compact, serviced/serviceable land and infrastructure assessment approach, this alternative would not allow for water supply, waste water, compact growth, public transport and co-ordinated development considerations to be integrated into the Plan to the highest degree.

Additional infrastructure would be required to accommodate sporadic development, more than would be required for Alternative 1 'More Compact Development' and some development may have to be serviced by private waste water treatment systems which would have to be properly maintained.

The development of the Town Centre and the Core Retail Area would be less compact and less sustainable under this scenario and would not optimally support the longer-term viability of the settlement.

Opportunity sites are identified but no clear guidance on the design parameters or uses identified – making successful applications for the sustainable, compact development of the town less likely.

An opportunity to mitigate potentially adverse effects arising from land use development to a significant degree would have been missed by the approach under Alternative Type 2 (ii): "Less Compact Development".

Selected Alternative: Type 2 (i): "More Compact Development"

Type 2 alternatives are assessed against Strategic Environmental Objectives on Table 7.4.

Table 7.4 Assessment of Type 2 Alternatives against Strategic Environmental Objectives

Alternative (selected alternative indicated in bold)	Likely to Improve status of SEOs			Potential Conflict with status of SEOs - likely to be mitigated			Probable Conflict with status of SEOs - unlikely to be mitigated	No Likely interaction with status of SEOs
	to a Greater degree	to a Moderate degree	to a Lesser degree	to a Lesser degree	to a Moderate degree	to a Greater degree		
Type 2 (i): "More Compact Development"	BFF PHH S W MA A C	CH L		BFF PHH S W MA A C	CH L			
Type 2 (ii): "Less Compact Development"		CHL	BFF PHH S W MA A C		CH L	BFF PHH S W MA A C		

# 7.3.3 Assessment of Type 3: Alternatives for Transport

### Type 3 (i) Low Carbon Corridor

Supporting the use of a low carbon Edenderry-Enfield rail-line corridor within the Plan boundary (Type 3 (i) Alternative A) would make the use of this corridor for sustainable modes of transport more likely. This would be likely to improve the potential for meeting important objectives relating to emissions/energy objectives. Applications for such development would be more likely to be granted permission. Project level consideration of environmental impacts and mitigation, including those relating to construction, would need to take place in the context of more detail around potential proposals.

Not explicitly supporting the use of a low carbon Edenderry-Enfield rail-line corridor within the Plan boundary, would make the use of this corridor for sustainable modes of transport less likely and make its redundant state more likely. This would be likely to reduce the potential for meeting important objectives relating to emissions/energy objectives. Applications for such development would be less likely to be granted permission. Project level consideration of environmental impacts and mitigation, including those relating to construction, would need to take place in the context of more detail around potential proposals.

#### **Selected Alternative: Alternative A**

# Type 3 (ii) Roadspace Capacity

These alternatives would have the potential to change behaviours and would influence the profile of users of the urban centre and mode share of transport. Reallocating roadspace within Edenderry to walking, cycling and public transport to accompany / occur concurrently with the provision of any additional roadspace capacity that may arise in the future (Type 3 (ii) Alternative A) could take the form of removing traffic from streets, removing lanes of traffic, narrowing carriageways, traffic management measures, or removing on-street parking to provide cycle tracks or widened footpaths. This would benefit efforts to maximise sustainable mobility. This would also facilitate the enhancement of the public realm (including cultural heritage and its context) by contributing towards the replacement of motorised transport modes with more sustainable and non-motorised modes. Project level consideration of environmental impacts and mitigation, including those relating to construction, would need

to take place in the context of more detail around proposals. To not accompany the development of additional roadspace capacity by a corresponding reallocation of roadspace within Edenderry to walking, cycling and public transport (Type 3 (ii) Alternative B) would not benefit efforts to maximise sustainable mobility.

**Selected Alternative: Alternative A** 

# Type 3 (iii) How to provide transport infrastructure

The provision of new transport infrastructure, with all additional environmental mitigation left to be defined until project level (Type 3 (iii) Alternative A) would offer the least certainty for environmental protection and management and would be more likely to result in important individual projects (relating to sustainable mobility and emissions objectives) not getting permission.

Specifying environmental constraints (including those related to habitats and potential impacts such as disturbance from lighting – e.g. minimising river crossings, avoiding sensitive habitats, not increasing barriers to flood waters and sustainable design and construction techniques) at Plan level (Type 3 (iii) Alternative B) would offer the most certainty for environmental protection and management and would be more likely to result in important individual projects (relating to sustainable mobility and emissions/energy objectives) receiving permission.

Selected Alternative: Alternative B

Type 3 alternatives are assessed against Strategic Environmental Objectives on Table 7.5.

Table 7.5 Assessment of Type 3 Alternatives against Strategic Environmental Objectives

Alternative (selected alternative indicated in bold)	Likely to Improve status of SEOs			Potential <u>Conflict</u> with status of SEOs - likely to be mitigated			Probable Conflict with status of SEOs - unlikely to be mitigated	No Likely interaction with status of SEOs
	to a Greater degree	to a Moderate degree	to a Lesser degree	to a Lesser degree	to a Moderate degree	to a Greater degree		O
Type 3 (i) Low 0	arbon Corridor							
A. Support	PHH A C MA			PHH A C		BFF S W L CH		
B. Do not explicitly support			PHH A C MA	BFF S W L CH		PHH A C MA		
Type 3 (ii) Road	space Capacity							
A. Reallocate	PHH A C MA CH			PHH A C MA CH		BFF S W L		
B. Do not reallocate						PHH A C MA CH		BFF S W
Type 3 (iii) How	to provide trans	sport infrastructu	ıre					
A. All additional environmental mitigation left to be defined until project level			BFF PHH S W MA A C CH L			BFF PHH S W MA A C CH L		
B. Environmental mitigation defined to a degree in relevant LAP provisions	BFF PHH S W MA A C CH L			BFF PHH S W MA A C CH L				

# Section 8 Evaluation of Draft Plan Provisions

# 8.1 Introduction

This section provides an assessment of environmental effects using the information on the current state of the environment (provided in Section 4) and the Strategic Environmental Objectives (see Table 8.1) from implementation of the Plan.

The Draft Plan provisions (and, in Section 7, the alternatives) are evaluated using compatibility criteria (see Table 8.2 below) in order to determine how they would be likely to affect the status of the existing environment and the SEOs. The SEOs and the Plan provisions (and, in Section 7, the alternatives) are arrayed against each other in order to demonstrate which interactions would cause effects on specific components of the environment. Where the appraisal identifies an interaction with the status of an SEO the relevant SEO code is entered into the relevant column.

The interactions identified are reflective of likely significant environmental effects:

- Interactions that would be *likely to improve the status* of a particular SEO would be likely to contribute towards a significant positive effect on the environmental component to which the SEO relates, including in-combination with the existing statutory planning/decision-making and consent-granting framework.
- Interactions that would *potentially conflict with the status* of *an SEO and would be likely to be mitigated* would be likely to result in potential significant negative effects; however, these effects will be mitigated by measures which have been integrated into the Plan, or associated County Development Plan, and residual effects would not be significant (see Table 8.3 of this report).
- Interactions that would probably *conflict with the status of an SEO and would be unlikely to be mitigated* would be likely to result in a significant residual negative effect on the environmental component to which the SEO relates.

Effects considered include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects.

The degree of significance of effects occurring cannot be fully determined at this level of decision making due to the lack of exact detail available with regard to the type or scale of development that will be permitted under the Plan. However, a strategic assessment can be undertaken.

Environmental	SEO	Environmental Ol Guiding Principle	Strategic Environmental Objectives
Component	Code	Salaing Filliciple	otratogio Environmental Objectives
Biodiversity, Flora and Fauna	BFF	No net contribution to biodiversity losses or deterioration	<ul> <li>To preserve, protect, maintain and, where appropriate, enhance the terrestrial, aquatic and soil biodiversity, particularly EU designated sites and protected species</li> <li>Ensure no adverse effects on the integrity of any European site, with regard to its qualifying interests, associated conservation status, structure and function</li> <li>Safeguard national, regional and local designated sites and supporting features which function as stepping stones for migration, dispersal and genetic exchange of wild species</li> <li>Enhance biodiversity in line with the National Biodiversity Strategy and its targets</li> <li>To protect, maintain and conserve natural capital</li> </ul>
Population	PHH	Improve quality of life for	Promote economic growth to encourage retention of working age population and
and Human Health		all ages and abilities based on high-quality, serviced, well connected and sustainable residential, working, educational and recreational environments	<ul> <li>funding of sustainable development and environmental protection and management</li> <li>Ensure that existing population and planned growth is matched with the required public infrastructure and the required services</li> <li>Safeguard citizens from environment-related pressures and risks to health and well-being</li> </ul>
Soil (and Land)	S	Ensure the long-term sustainable management of land	<ul> <li>Protect soils against pollution, and prevent degradation of the soil resource</li> <li>Promote the sustainable use of infill and brownfield sites over the use of greenfield sites</li> <li>Safeguard areas of prime agricultural land and designated geological sites</li> </ul>
Water	W	Protection, improvement and sustainable management of the water resource	<ul> <li>Ensure that the status of water bodies is protected, maintained and improved in line with the requirements of the Water Framework Directive</li> <li>Ensure water resources are sustainably managed to deliver proposed regional and County growth targets in the context of existing and projected water supply and waste water capacity constraints ensuring the protection of receiving environments</li> <li>Avoid inappropriate zoning and development in areas at risk of flooding and areas that are vulnerable to current and future erosion</li> <li>Integrate sustainable water management solutions (such as SuDS, porous surfacing and green roofs) into development proposals</li> </ul>
Material Assets	МА	Sustainable and efficient use of natural resources	<ul> <li>Optimise existing infrastructure and provide new infrastructure to match population distribution proposals</li> <li>Ensure access to affordable, reliable, sustainable and modern energy for all which encourages a broad energy generation mix to ensure security of supply</li> <li>Promote the circular economy, reduce waste, and increase energy efficiencies</li> <li>Ensure there is adequate sewerage and drainage infrastructure in place to support new development</li> <li>Reduce the energy demand from the transport sector and support moves to electrification of road and rail transport modes</li> <li>Encourage the transition to a zero-carbon economy by facilitating the development of a grid infrastructure to support renewables and international connectivity. Reduce the average energy consumption per capita including promoting energy efficient buildings, retrofitting, smart- buildings, cities and grids</li> </ul>
Air	Α	Support clean air policies that reduce the impact of air pollution on the environment and public health	<ul> <li>To avoid, prevent or reduce harmful effects on human health and the environment as a whole resulting from emissions to air from all sectors with particular reference to emissions from transport, residential heating, industry and agriculture.</li> <li>Maintain and promote continuing improvement in air quality through the reduction of emissions and promotion of renewable energy and energy efficiency.</li> <li>Promote continuing improvement in air quality.</li> <li>Reduction of emissions of sulphur dioxide, nitrogen oxides, volatile organic compounds, ammonia and fine particulate matter which are responsible for acidification, eutrophication and ground-level ozone pollution</li> <li>Meet Air Quality Directive standards for the protection of human health — Air Quality Directive</li> <li>Significantly decrease noise pollution by 2020 and move closer to WHO recommended levels.</li> </ul>
Climatic Factors <sup>49</sup>	С	Achieving transition to a competitive, low carbon, climate-resilient economy that is cognisant of environmental impacts	<ul> <li>To minimise emissions of greenhouse gasses.</li> <li>Integrate sustainable design solutions into infrastructure (e.g. energy efficient buildings; green infrastructure).</li> <li>Contribute towards the reduction of greenhouse gas emissions in line with national targets.</li> <li>Promote development resilient to the effects of climate change</li> <li>Promote the use of renewable energy, energy efficient development and increased use of public transport</li> </ul>
Cultural Heritage	СН	Safeguard cultural heritage features and their settings through responsible design and positioning of development	Protect places, features, buildings and landscapes of cultural, archaeological or architectural heritage
Landscape	L	Protect and enhance the landscape character	<ul> <li>To implement the Plan's framework for identification, assessment, protection, management and planning of landscapes having regard to the European Landscape Convention</li> </ul>

<sup>&</sup>lt;sup>48</sup> See also Section 5
<sup>49</sup> Please also refer to relevant legislation and requirements under Sections 4.10, 8.5, 8.7.8 and Appendix I. Targets under the national Climate Action Plan are reviewed and updated periodically and include those under the headings of Electricity, Built Environment, Transport, Agriculture, Forestry & Land Use and Enterprise.

Table 8.2 Criteria for appraising the effect of the Plan provisions on SEOs

Likely to <b>Improve</b> status of SEOs	Potential <b>Conflict</b> with status of SEOs -	Probable	No Likely
	likely to be mitigated	Conflict with	interaction
		status of SEOs -	with status of
		unlikely to be	SEOs
		mitigated	
+	-	_	0

# 8.2 Cumulative Effects<sup>50</sup>

Cumulative effects are one of the types of effects which have been considered by the assessment of the alternatives. Cumulative effects can be described as the addition of many small impacts to create one larger, more significant, impact.

There are two types of potential cumulative effects that have been considered, namely:

- Potential intra-Plan cumulative effects these arise from the interactions between different types of potential environmental effects resulting from a plan, programme, etc. Where there are elevated levels of environmental sensitivities (such as those identified under Section 4), future development could result in environmental conflicts and lead to a deterioration in environmental integrity. The interrelationships between environmental components that help determine these potential effects are identified on Table 8.5 e.g. interrelationships between: human health and water quality; human health and air quality; human health and flood risk; and ecology and water quality.
- Potential *inter-Plan* cumulative effects these arise when the effects of the implementation of one plan occur in combination with those of other plans, programmes, developments, etc.

Effects that may arise as a result of implementing the Plan have been mitigated to the extent that the only residual adverse effects likely to occur as a result of implementation of the Plan are those which are identified under Table 8.3.

Other policies, plans and programmes that have been considered by the assessment of effects include those which are detailed under Section 2.5 (and associated Appendix I "Relationship with Legislation, Plans and Programmes"), Section 4 and Section 5. Plans and programmes from various sectors will interact with the Plan, including those relating to land use planning. These plans and programmes are subject to their own environmental assessment requirements as relevant. Examples include:

- Land use policy, plans and programmes (e.g. the National Planning Framework, the Eastern and Midland Regional Spatial and Economic Strategy, the Offaly County Development Plan 2021-2027, adjoining County Development Plans and Local Area Plans)
- Offaly Local Economic and Community Plan and the Local Economic and Community Plans of adjoining counties;
- Energy policy, plans and programmes (e.g. Grid25 and associated Implementation Programme, Ireland's National Renewable Energy Action Plan 2010, Strategy for Renewable Energy 2012-2020, Offshore Renewable Energy Development Plan, Draft National Energy and Climate Plan 2021-2030 and the Renewable Electricity Policy and Development Framework);
- Climate related policy, plans and programmes (e.g. the National Climate Policy Position and Climate Action 2014, Climate Action and Low Carbon Development Act 2015, as amended, Climate Action Plan 2021, National Mitigation Plan 2017, the National Adaptation Framework 2018 and the Offaly Climate Change Adaptation Strategy 2019-2024);

<sup>&</sup>lt;sup>50</sup> The EPA's guidance note 'Good Practice Guidance note on cumulative effects assessment in SEA' has been considered in the assessment.

- Water services, waste management, transport and energy infrastructure plans (e.g. Irish Water's Water Services Strategic Plan and associated Capital Investment Plan, Eastern-Midlands Regional Waste Management Plan and Transportation Policies and Strategies); and
- Environmental protection and management plans (e.g. River Basin Management Plans and Flood Risk Management Plans).

#### Potential cumulative/in combination effects include:

- Contributions towards reductions in travel related greenhouse gas and other emissions to air, reductions in consumption from non-renewables and associated achievement of legally binding targets (in combination with plans and programmes from all sectors, including energy, transport and land use planning) as a result of facilitating:
  - o sustainable compact growth;
  - sustainable mobility/a shift from motorised transport modes to more sustainable and non-motorised transport modes; and
  - o renewable energy development.
- Contributions towards travel related greenhouse gas and other emissions to air (in combination with plans and programmes from all sectors, including transport and land use planning) as a result of facilitating development which must be accompanied by road capacity;
- Facilitation of new development that is accompanied by appropriate levels of water services thereby contributing towards environmental protection;
- Need for and use of water and waste water treatment capacity arising from new developments and associated potential adverse effects;
- Potential cumulative effects upon surface and ground water status as a result of housing, employment, agricultural and forestry loadings and abstractions;
- Potential cumulative effects (habitat damage, enhancing ecological connectivity, contributing towards sustainable mobility) arising from linear developments, such as those relating to Green Infrastructure, including beyond the Plan boundary;
- Potential cumulative effects on flood risk by, for example, development of greenfield lands or obstruction of flood paths; and
- In combination with plans and programmes from all sectors potential adverse effects on all environmental components arising from all development in greenfield and brownfield areas (e.g. infrastructural, residential, economic, agricultural etc.). The type of these effects are consistent with those described on Table 8.3. These plans and programmes are required to comply with environmental legislation and undergo SEA and AA as relevant comply with environmental legislation while projects are subject to EIA and AA, as relevant.

These effects would have the potential, if unmitigated, if they occurred, to result in changes in the environment within and beyond the Plan area.

A variety of the issues covered by the Plan provisions are regional and county issues which are considered: at Regional Assembly level, in the Eastern and Midland RSES and by planning authorities across the Region; and at County level, including through the Offaly County Development Plan 2021-2027. The solutions to these issues are often regional solutions which are subject their own consenting procedures. Works arising outside of the Plan area as a result of providing for new development within the Plan area, including works arising as a result of the cumulative provision of development in the wider County and wider Eastern and Midland region, would potentially conflict with a number of environmental components, across the wider County and wider Eastern and Midland region and beyond, including: ecology, soil function, the status of water bodies and the landscape. Some of these conflicts would be mitigated by measures which will be integrated into the Plan while some will be mitigated by measures arising out of separate consent procedures.

# 8.3 Overall Evaluation

Offaly County Council have integrated various recommendations arising from the SEA process into the Plan (see Section 9). Table 8.3 provides a detailed overall evaluation of the environmental effects arising from the Plan. The effects encompass all in-combination/cumulative effects arising from implementation of the Plan. The potentially significant adverse environmental effects (if unmitigated) arising from implementation of the Plan are detailed as are residual effects, taking into account mitigation integrated into both the Draft Plan and the Offaly County Development Plan 2021-2027 – see Section 9.

Environmental impacts which occur will be determined by the nature and extent of multiple or individual projects and site-specific environmental factors. Strategic Environmental Objective (SEO) codes are taken from Table 8.1.

# Table 8.3 Overall Evaluation – Effects arising from the Plan

Environmental Component	Effects include in-combination effects that are planned for through the wider planning framework including the NPF and associated NDP, the Eastern and Midland RSES, the Offaly County  Development Plan 2021-2027 and adjacent Development Plans and lower-tier land use plans.								
	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non- Significant Effects						
Biodiversity and Flora and Fauna	<ul> <li>Contribution towards protection of ecology (including designated sites, ecological connectivity, habitats) by facilitating development of lands (including those within and adjacent to the Plan area) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the Plan area and beyond.</li> <li>Contribution towards the maintenance of existing green infrastructure and associated ecosystem services, listed species, ecological connectivity and non-designated habitats.</li> <li>Contribution towards protection and/or maintenance of biodiversity and flora and fauna by contributing towards the protection of natural capital including the environmental vectors of air, water and soil. Biodiversity and flora and fauna includes biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species (including birds and bats), listed/protected species, ecological connectivity and non-designated habitats (including terrestrial and aquatic habitats), and disturbance to biodiversity and flora and fauna – including terrestrial and aquatic biodiversity and flora and fauna.</li> <li>Sustains existing sustainable rural management practices – and the communities who support them – to ensure the continuation of long-established managed landscapes and the flora and fauna that they contain.</li> </ul>	Arising from both construction and operation of development and associated infrastructure:  • Loss of/damage to biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species, listed species, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna;  • Habitat loss, fragmentation and deterioration, including patch size and edge effects; and  • Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species such as birds (e.g. swifts) and bats.	Loss of an extent of non-protected habitats and species arising from the replacement of semi-natural land covers with artificial surfaces.     Losses or damage to ecology (these would be in compliance with relevant legislation).	BFF					

Environmental Component	Environmental Effects, in combination with the wider planning framework  Effects include in-combination effects that are planned for through the wider planning framework including the NPF and associated NDP 2018, the Eastern and Midland RSES, adjacent  Development Plans and lower-tier land use plans.							
	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non- Significant Effects					
Population and Human Health	<ul> <li>Promotion of economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management.</li> <li>Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands (including those within and adjacent to the Plan area) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere in the Plan area and beyond</li> <li>Contribution towards the protection of human health by facilitating development of lands (including those within and adjacent to the Plan area) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the Plan area and beyond.</li> <li>Contributes towards protection of human health as a result of contributing towards the protection of natural capital including environmental vectors, including air and water.</li> </ul>	<ul> <li>Potential adverse effects arising from flood events.</li> <li>Potential interactions if effects arising from environmental vectors.</li> </ul>	Potential interactions with residual effects on environmental vectors – please refer to residual adverse effects under "Soil", "Water" and "Air and Climatic Factors" below.	РНН				
Soil	<ul> <li>Contribution towards the protection of soils (including those used for agriculture) and designated sites of geological heritage by facilitating development of lands (including those within and adjacent to the Plan area) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the Plan area and beyond.</li> <li>Contribution towards the protection of the environment from contamination the highest standards of remediation, and where appropriate to consultations with the EPA and other relevant bodies, will be required to resolve any instances of environmental pollution created by contaminated land.</li> </ul>	<ul> <li>Potential adverse effects on the hydrogeological and ecological function of the soil resource, including as a result of development on contaminated lands.</li> <li>Potential for riverbank erosion.</li> </ul>	Loss of an extent of soil function arising from the replacement of semi-natural land covers with artificial surfaces.	S				

Environmental								
Component	Effects include in-combination effects that are planned for through the wider planning framework including the NPF and associated NDP 2018, the Eastern and Midland RSES, adjacent  Development Plans and lower-tier land use plans.							
	Significant Positive Effect, likely to occur Potentially Significant Adverse Environmental Effects, if Likely Residual Adverse Non							
		unmitigated	Significant Effects					
Water	<ul> <li>Contribution towards the protection of water by facilitating development of lands (including those within and adjacent to the Plan area) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the Plan area and beyond.</li> <li>Contributions towards the protection of water resources including the status of surface and groundwaters and water-based designations.</li> <li>Contribution towards flood risk management and appropriate drainage.</li> </ul>	<ul> <li>Potential adverse effects upon the status of water bodies and entries to the WFD Register of Protected Areas (ecological and human value), arising from changes in quality, flow and/or morphology.</li> <li>Increase in flood risk and associated effects associated with flood events.</li> </ul>	<ul> <li>Any increased loadings as a result of development to comply with the River Basin Management Plan.</li> <li>Flood related risks remain due to uncertainty with regard to extreme weather events – however such risks will be mitigated by measures that have been integrated into the Plan.</li> </ul>	W				
Material Assets	<ul> <li>Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands (including those within and adjacent to the Plan area) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere in the Plan area and beyond.</li> <li>Contribution towards compliance with national and regional water services and waste management policies.</li> <li>Contribution towards increase in renewable energy use by facilitating renewable energy and electricity transmission infrastructure developments.</li> <li>Contribution towards limits in increases in energy demand from the transport sector by facilitating sustainable compact growth.</li> <li>Contribution towards reductions in average energy consumption per capita including promoting energy efficient buildings, retrofitting, smart buildings, cities and grids.</li> </ul>	<ul> <li>Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity ensures the mitigation of potential conflicts).</li> <li>Failure to adequately treat surface water run-off that is discharged to water bodies (water services infrastructure and capacity ensures the mitigation of potential conflicts).</li> <li>Failure to comply with drinking water regulations and serve new development with adequate drinking water (water services infrastructure and capacity ensures the mitigation of potential conflicts).</li> <li>Increases in waste levels.</li> <li>Potential impacts upon public assets and infrastructure.</li> <li>Interactions between agricultural waste and soil, water, biodiversity and human health – including as a result of emissions of ammonia from agricultural activities (e.g. manure handling, storage and spreading) and the production of secondary inorganic particulate matter.</li> </ul>	Exceedance of capacity in critical infrastructure risks remain, including due to uncertainty with regard to climate – however, such risks will be mitigated by: measures, including those requiring the timely provision of critical infrastructure, and compliance with the Water Framework Directive and associated River Basin Management Plan.  Residual wastes to be disposed of in line with higher-level waste management policies.  Any impacts upon public assets and infrastructure to comply with statutory planning/consent-granting framework.	MA				

Environmental		Report for the Draft Edenderry Local Area Plan 2023-2029		SEO				
Component	Effects include in-combination effects that are planned for through the wider planning framework including the NPF and associated NDP 2018, the Eastern and Midland RSES, adjacent Development Plans and lower-tier land use plans.							
	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmittigated	Likely Residual Adverse Non- Significant Effects					
Air and Climatic Factors	<ul> <li>Contribution towards climate mitigation and adaptation by facilitating compact development of lands (including those within and adjacent to the Plan area) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere in the Plan area and beyond.</li> <li>In combination with other plans, programmes etc., contribution towards the objectives of the wide policy framework relating to climate mitigation and adaptation, and associated contribution towards maintaining and improving air quality and managing noise levels, including through measures relating to:         <ul> <li>Sustainable compact growth;</li> <li>Sustainable mobility, including walking, cycling and public transport;</li> <li>Drainage, flood risk management and resilience;</li> <li>Sectors including agriculture, residential heating and infrastructure;</li> <li>Sustainable infrastructure design solutions including energy efficient buildings; green infrastructure).</li> </ul> </li> </ul>	<ul> <li>Potential conflict between development under the Plan and aiming to reduce carbon emissions in line with local, national and European environmental objectives.</li> <li>Potential conflicts between transport emissions, including those from cars, and air quality.</li> <li>Potential conflicts between increased frequency of noise emissions and protection of sensitive receptors.</li> <li>Potential conflicts with climate adaptation measures including those relating to flood risk management.</li> </ul>	An extent of travel related greenhouse gas and other emissions to air. This has been mitigated by provisions which have been integrated into the Plan, including those relating to sustainable compact growth and sustainable mobility.  Interactions between noise emissions and sensitive receptors. Various provisions have been integrated into the Plan to ensure that noise levels at sensitive receptors will be minimised.	AC				
Cultural Heritage	<ul> <li>Contributes towards protection of cultural heritage elsewhere by facilitating development within the Plan area.</li> <li>Contributes towards protection of cultural heritage within the Plan area by facilitating brownfield development and regeneration.</li> </ul>	Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities.	Potential effects on known architectural and archaeological heritage and unknown archaeology however, these will occur in compliance with legislation.	СН				
Landscape	Contributes towards protection of wider landscape and landscape designations by facilitating development within the Plan area.	Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape.	Landscapes will change overtime as a result of natural changes in vegetation cover combined with new developments that will occur in compliance with the Plan's landscape protection measures.	L				

# 8.4 Appropriate Assessment and Strategic Flood Risk Assessment

Stage 2 Appropriate Assessment (AA) is being undertaken alongside the preparation of the Plan. The requirement for AA is provided under the EU Habitats Directive (Directive 1992/43/EEC). The AA assesses the effects of the Plan on European Sites designated for certain habitats and species. The emerging conclusion of the AA is that the Draft Plan will not affect the integrity of the Natura 2000  $^{1}$  network<sup>51</sup>.

A Strategic Flood Risk Assessment (SFRA) document accompanies this SEA Environmental Report and the Draft Plan. Requirements in relation to SFRA are provided under 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (Department of Environment and Office of Public Works, 2009) and associated Department of the Environment, Community and Local Government Circular PL2/2014. Flood risk management and drainage provisions are already in force through the County Development Plan and related provisions have been integrated into the LAP. In addition, land use zoning contained within the Draft Plan has been informed by the SFRA process and associated delineation of flood risk zones.

Various policies and objectives have been integrated into the Draft Plan through the SEA, SFRA and AA processes.

# 8.5 Interactions with Climate Mitigation and Adaptation

Table 8.4 (taken from Chapter 8 of the Draft Plan) summarises how considerations relating to climate have been incorporated into the Draft Plan.

#### Table 8.4 How Climate Action has been integrated into the Draft Plan

#### Chapter 1 – Introduction and Context

• Climate is a core consideration in international, European, national, regional and county policy and legislation in addition to Ministerial Guidelines/policy Directives, which this Plan has taken account of in its preparation.

#### Chapter 2 - Economic Development Strategy

- Supports and promotes the development of economic and enterprise development and activity in a manner, which contributes to the transition to a low carbon, climate resilient and environmentally sustainable settlement.
- Promotes transformative projects with the support of Government funding streams for low-carbon focused projects.

### Chapter 3 – Town Centre and Regeneration

- Supports the development of sustainable low-carbon climate resilient communities and encourages a climate adaptation and mitigation approach to developments, which enable regeneration.
- Promotes the concept of compact growth through the re-use /renewal of vacant, derelict or underutilised buildings in the Town Centre.

# Chapter 4 - Built Heritage

Encourages the rehabilitation, renovation, climate-proofing and re-use of existing historic structures, where
appropriate, over the demolition of same and new-build on-site.
 Encourages the rehabilitation, renovation, climate-proofing and re-use of existing vernacular structures that are
not listed on the Record of Protected Structures, over the demolition of same and new-build on-site.

<sup>&</sup>lt;sup>51</sup> Except as provided for in Article 6(4) of the Habitats Directive, viz. There must be:

<sup>(</sup>a) no alternative solution available;

<sup>(</sup>b) imperative reasons of overriding public interest for the plan/programme/project to proceed; and

<sup>(</sup>c) adequate compensatory measures in place.

#### Chapter 5 - Residential

- Ensures that Edenderry, a Self-Sustaining Town, grows at a sustainable level in line with the Core Strategy Table and deliver consolidation and targeted 'catch up' investment in services, infrastructure, amenities and local employment in order to become more self-sustaining.
- Encourages the compact growth of Edenderry and the appropriate redevelopment of brownfield and infill sites for residential and mixed uses within the existing built-up footprint of Edenderry Town.
- Promotes growth in a sustainable and sequential manner, characterised by a compact, consolidated and
  permeable pattern of development linked by sustainable modes of transport including a robust network of
  pedestrian and cycle routes, enabling more people to be closer to employment, recreational and sustainable
  transport opportunities.
- Ensures resilience is built into the housing stock in Edenderry through: reuse, energy efficiency, lifetime adaptability, universal design, sustainable accessibility, and integration to ensure vibrant sustainable communities.

#### Chapter 6 - Biodiversity and Green Infrastructure

Includes multiple policies and objectives that promotes the protection and enhancement of the green
infrastructure network of the town, thereby providing important amenity and recreational spaces for communities
but also economically viable and effective tools to combat the impacts of climate change. Benefits of Green
Infrastructure measures as outlined in Chapter 6 include flood prevention, CO2 storage, filtration of pollutants,
providing connectivity for migrating species and lowering building energy demands.

#### Chapter 7 - Community

The promotion of best practice measures to ensure that social and community facilities should be within walking
distance of the town centre, housing and public transportation, which will help reduce greenhouse gas emissions
by allowing people to travel to these facilities by sustainable transport modes.

#### **Chapter 9 – Critical Infrastructure**

- Policies are included which improve accessibility and movement within Edenderry, reduce dependency on private car transport, increase permeability in the town, and encourage the use of energy efficient forms of transport through the promotion of walking, cycling, public transport and electric vehicles.
- Requires that all developments provide appropriate Sustainable Urban Drainage Systems (SuDS) and other
  nature-based solutions and that flood risk in Edenderry is managed in conjunction with the Office of Public Works
  and in accordance with the requirements of the Planning System and Flood Risk Management Guidelines for
  Planning Authorities (2009) and circular PL02/2014 (August 2014).

#### Chapter 10 - Infrastructural and Planning Assessment

• In accordance with National Policy Objective 72a of Project Ireland 2040: The National Planning Framework, the Planning Authority has taken a standardised, tiered approach to differentiate between; i) zoned land that is serviced and ii) zoned land that is serviceable within the life of the plan to ensure co-ordination between land use zoning, infrastructure and services. This assessment supports the National Planning Framework and its National Strategic Outcomes and Priorities of the National Development Plan.

#### Chapter 11 - Land Use Zoning Objectives

 Seeks adherence to the land use zoning objectives in the interests of orderly development by integrating land use and transportation.

#### Chapter 12 - Implementation and Monitoring

 Requires new development to be phased to ensure that it occurs in a sequential and efficient manner and in tandem with the delivery of supporting physical and social infrastructure ensuring development proceeds in a sustainable and co-ordinated manner ensuring sustainable use of natural resources.

# 8.6 Interrelationship between Environmental Components

The SEA Directive requires the Environmental Report to include information on the likely significant effects on the environment, including on issues such as biodiversity, fauna, flora, population, human health, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors.

Likely significant effects on environmental components which are identified include those which are interrelated; implementation of the Plan will not affect the interrelationships between these components. The presence of significant interrelationships between environmental components is identified on Table 8.5.

**Table 8.5 Presence of Interrelationships between Environmental Components** 

Component	Biodiversity, flora and fauna	Population and human health	Soil	Water	Air and Climatic factors	Material assets	Cultural heritage	Landscape
Biodiversity, flora and fauna		Yes	Yes	Yes	Yes	Yes	No	Yes
Population and Human Health			Yes	Yes	Yes	Yes	No	No
Soil				Yes	No	Yes	No	No
Water					No	Yes	No	No
Air and Climatic Factors						Yes	No	No
Material Assets							Yes	Yes
Cultural Heritage								Yes
Landscape								

# 8.7 Detailed Evaluation

For an explanation of SEO codes e.g. BFF, PHH, S, W, etc. refer to Table 8.1 on page 70.

The following applies to each of the sub-sections 8.7.1 to 8.7.12 below:

The Plan is situated in a hierarchy of documents setting out public policy setting out public policy for, among other things, land use planning, infrastructure, sustainable development, tourism, environmental protection and environmental management, such as the National Planning Framework, the National Development Plan, the National Mitigation Plan, the National Adaptation Framework, the Climate Action Plan, the Regional Spatial and Economic Strategy for the Eastern and Midland Region and the Offaly County Development Plan 2021-2027 (for additional detail please refer to Section 2.5 "Relationship with other relevant Plans and Programmes" in this report).

These other existing policies, plans etc. have been subject to their own environmental assessment processes, as relevant, and already provide for various measures that have been compiled into the Plan. The Plan aligns with these documents and will be incorporated into the review and preparation of these documents.

Lower tier plans and projects must be consistent and comply with the provisions of the Plan and of these other policies, plans etc. and will be subject to their own project level EIA and AA requirements as relevant. An assessment of cumulative effects is provided at Section 8.2 of this report.

# 8.7.1 Chapter 1: Introduction

	Likely to	Potential <b>Conflict</b>	Probable	No Likely
		with status of		interaction
	status of	SEOs - likely to be	with	with
	SEOs	mitigated	status of	status of
			SEOs -	SEOs
			unlikely	
			to be	
			mitigated	
	+	-	-	0
Provisions of this Chapter include those relating to the Plan's Strategic Aims. For more details, please refer to the Plan.	BFF PHH	BFF PHH S W MA		
	S W MA A	A C CH L		
	C CH L			

#### Commentary

The assessment of the provisions of this chapter against Strategic Environmental Objectives (SEOs BFF, PHH, S, W, MA, A, C, CH and L) is consistent with the:

- Environmental effects detailed under subsections 8.2 to 8.7 of this report; and
- Assessments of the selected alternatives for the Plan provided at Section 7 of this report.

Implementing the Plan will help to direct incompatible development away from the most sensitive areas in the town and focus on directing compact, sustainable development within the existing envelope of the Plan area. Development of these generally more robust, well-serviced and well-connected areas of the town will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development can be accompanied by placemaking initiatives to enable the town to become a more desirable place to live – so that it maintains populations and services. Compatible sustainable development in the town's sensitive areas is also provided for, subject to various requirements relating to environmental protection and management being met.

The provisions in this Chapter of the Plan would contribute towards the Statutory consent granting and decision-making framework for land use developments and activities and sustainable development of the Plan area, in combination with other Plan provisions and other plans, programmes, strategies, etc. Potential adverse environmental effects arising from land use development and activities include in-combination effects arising from services and infrastructure to service development, for example those relating to water services, transport and energy.

The SEA process that is being undertaken alongside the preparation of the Plan has brought about various changes to the emerging Plan through an iterative process. Some of these measures are reproduced under Section 9 "Mitigation Measures" of this report. By integrating SEA recommendations into the Plan, Offaly County Council is helping to ensure that:

- The potential significant adverse effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are avoided, reduced or offset; and
- The beneficial environmental effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are maximised.

The Strategic Aims contained within Chapter 1 will contribute towards the sustainable development of the Plan area and the protection and management of the environment.

# 8.7.2 Chapter 2: Economic Development Strategy

	Likely to	Potential <b>Conflict</b>	Probable	No Likely
	<u>Improve</u>	with status of		interaction
	status of	SEOs - likely to be	with	with
	SEOs	mitigated	status of	status of
			SEOs -	SEOs
			unlikely	
			to be	
			mitigated	
	+	-	-	0
Provisions of this Chapter include those relating to economic development. For more details, please refer to the Plan.		BFF PHH S W MA		
	S W MA A	A C CH L		
	C CH L			

#### Commentary

The assessment of the Plan's Economic Development Strategy provisions against Strategic Environmental Objectives (SEOs BFF, PHH, S, W, MA, A, C, CH and L) is consistent with the:

- Environmental effects detailed under subsections 8.2 to 8.7 of this report; and
- Assessments of the selected alternatives for the Plan provided at Section 7 of this report.

Implementing the Plan will help to direct incompatible development away from the most sensitive areas in the town and focus on directing compact, sustainable development within the existing envelope of the Plan area. Development of these generally more robust, well-serviced and well-connected areas of the town will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development can be accompanied by placemaking initiatives to enable the town to become a more desirable place to live – so that it maintains populations and services. Compatible sustainable development in the town's sensitive areas is also provided for, subject to various requirements relating to environmental protection and management being met.

The provisions in this Chapter of the Plan would contribute towards the Statutory consent granting and decision-making framework for land use developments and activities and sustainable development of the Plan area, in combination with other Plan provisions and other plans, programmes, strategies, etc. Potential adverse environmental effects arising from land use development and activities include in-combination effects arising from services and infrastructure to service development, for example those relating to water services, transport and energy.

This includes the Regional Spatial and Economic Strategy that specifically highlights the region as a "key destination for tourism, leisure and recreation activities", with a policy to support the development of an integrated network of greenways, blueways and peatways, while ensuring that high value assets and amenities are protected and enhanced.

The provisions in this Chapter of the Plan support land use activities and developments relating to tourism – and would have the potential to contribute towards an increase in the number and dwell time of visitors and associated potential adverse effects. Such effects would include in-combination effects arising from services and infrastructure to service development, including tourism. Examples may include developments/operation of developments relating to water services, transport, energy, access or accommodation. The mitigation of potential adverse effects arising would be contributed towards by Plan provisions including those relating to infrastructure capacity, visitor management, green infrastructure and ecosystem services.

The development of new and existing greenways, blueways, trails and walking and cycling routes has the potential to contribute towards sustainable mobility and a better management of mobility and tourism in sensitive areas, thereby benefitting various environmental components including habitats at certain locations. The development of these projects, however, presents a variety of potentially adverse environmental effects that would, if unmittated, have the potential to arise from both the construction and operation of such developments and/or their ancillary infrastructure. These types of infrastructure are often constructed in ecologically and visually sensitive areas adjacent to the banks of rivers and streams. Potential adverse effects would be mitigated both by measures which have been integrated into the Plan which provide for and contribute towards environmental protection, environmental management and sustainable development (including those identified at Section 9 of this report) and by measures arising from lower tier assessments (including those for the preparation of lower tier plans and projects).

The SEA process that is being undertaken alongside the preparation of the Plan has brought about various changes to the emerging Plan through an iterative process. Some of these measures are reproduced under Section 9 "Mitigation Measures" of this report. By integrating SEA recommendations into the Plan, Offaly County Council is helping to ensure that:

- The potential significant adverse effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are avoided, reduced or offset; and
- The beneficial environmental effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are maximised.

The provisions in this Chapter of the Plan would contribute towards the sustainable development and the protection and management of the environment, for example:

- EDP-03 "...enhance the aesthetics of the town's built and natural character..."
- EDP-24 "Promote transformative projects with the support of Government funding streams for low-carbon focused projects"

Further to these provisions there are various other provisions in the County Development Plan 2021-2027 with which new development under the Local Area Plan would have to comply with as relevant. For example:

- TRP-08 "It is Council policy to protect natural resources on which tourism is based through the enforcement of policies and relevant legislation in relation to protection of resources, architectural conservation areas, peatlands, water quality, species and populations of conservation concern and biodiversity, rural housing and holiday home development."
- TRP-19 "where it is demonstrated that no significant environmental effects would arise as a consequence of their construction or operation"

- TRP-07, 14 & 15 "subject to proper planning, environmental protection and sustainable development"
- TRP-09 "It is Council policy to seek to manage any increases in visitor numbers in order to avoid significant effects including loss of habitat and disturbance and impacts on existing infrastructure. Visitor / habitat management plans will be required for proposed tourism projects as relevant and appropriate"

# 8.7.3 Chapter 3: Town Centre and Regeneration

	Likely to	Potential <b>Conflict</b>	Probable	No Likely
	<u>Improve</u>	with status of		interaction
	status of	SEOs - likely to be	with	with
	SEOs	mitigated	status of	status of
			SEOs -	SEOs
			unlikely	
			to be	
			mitigated	
	+	-	-	0
Provisions of this Chapter include those relating to the town centre and regeneration. For more details, please refer to the Plan.	BFF PHH	BFF PHH S W MA		
	S W MA A	A C CH L		
	C CH L			

#### Commentary

The assessment of the Plan's Town Centre and Regeneration provisions against Strategic Environmental Objectives (SEOs BFF, PHH, S, W, MA, A, C, CH and L) is consistent with the:

- Environmental effects detailed under subsections 8.2 to 8.7 of this report; and
- Assessments of the selected alternatives for the Plan provided at Section 7 of this report.

Implementing the Plan will help to direct incompatible development away from the most sensitive areas in the town and focus on directing compact, sustainable development within the existing envelope of the Plan area. Development of these generally more robust, well-serviced and well-connected areas of the town will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development can be accompanied by placemaking initiatives to enable the town to become a more desirable place to live – so that it maintains populations and services. Compatible sustainable development in the town's sensitive areas is also provided for, subject to various requirements relating to environmental protection and management being met.

The provisions in this Chapter of the Plan would contribute towards the Statutory consent granting and decision-making framework for land use developments and activities and sustainable development of the Plan area, in combination with other Plan provisions and other plans, programmes, strategies, etc. Potential adverse environmental effects arising from land use development and activities include in-combination effects arising from services and infrastructure to service development, for example those relating to water services, transport and energy.

Town Centre and Regeneration provisions include those relating to the Blundell Lands and their redevelopment and enhancement. These provisions and the redevelopment of this area would contribute towards the vibrancy, diversity, vitality, attractiveness, safety, liveability and compact growth of Edenderry Town Centre. Demonstration of adherence with the provisions of the Masterplan would contribute towards achieving sustainable urban design, place-making and connectivity for the area.

The SEA process that is being undertaken alongside the preparation of the Plan has brought about various changes to the emerging Plan through an iterative process. Some of these measures are reproduced under Section 9 "Mitigation Measures" of this report. By integrating SEA recommendations into the Plan, Offaly County Council is helping to ensure that:

- The potential significant adverse effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are avoided, reduced or offset; and
- The beneficial environmental effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are maximised.

The provisions in this Chapter of the Plan would contribute towards the sustainable development and the protection and management of the environment, for example:

- TCP-01 "Protect and promote the vitality and viability of Edenderry's Core Retail Area, and to ensure that it remains the primary location for retail development, through the application of a sequential approach to development."
- TCP-03 "Facilitate the redevelopment and enhancement of the Blundell Lands Opportunity Site for a mixture of uses..."
- TCP-06 "Ensure that growth planned for Edenderry town over the life of the Plan occurs in a sustainable and sequential manner, characterised by a compact, consolidated and permeable pattern of development linked by sustainable modes of transport including a robust network of pedestrian and cycle routes."
- TCP-11 "To require that developments within or adjacent to the area of the Blundell Masterplan, Edenderry, 2020 demonstrate adherence to the urban design, place making and connectivity principles for the masterplan area."
- TCP-12 "...development of sustainable low-carbon climate resilient communities and encourage a climate adaptation and mitigation approach to developments..."
- TCP-13 "Incorporate Sustainable Urban Drainage Systems (SuDS) and other nature-based solutions in accordance with the 'Nature-based Solutions to the Management of Rainwater and Surface Water Runoff in Urban Areas Best Practice Interim Guidance Document, 2022' and any subsequent editions."
- TCP-16 "Seek a survey of existing numbers of bats, swifts and swift/nests for planning applications for renovations, redevelopment or demolition of old buildings in Edenderry Town centre. Where bats and/or swifts are shown to be present, specific mitigation measures during and after construction shall be proposed."

Further to these provisions there are various other provisions in the County Development Plan 2021-2027 with which new development under the Local Area Plan would have to comply with as relevant. For example:

- RTCP-05 "promote the reuse of vacant retail floorspace"
- RTCP-12 "high quality architectural design and high quality layout / urban design in retail development to support and promote healthy place-making and quality of life."
- RTCP-18 "support the development of environmentally sustainable low-carbon climate resilient communities and to encourage a climate adaptation and mitigation approach to retail development, for example the provision of green infrastructure, sustainable mobility and accessibility, sustainable urban drainage systems, water harvesting and renewable energy"
- RP-02 "suitable redevelopment of derelict and vacant sites"
- RP-05 "heritage-led regeneration"
- RP-06 "promote the liveability and sustainability of our settlements"
- RP-08 "high quality and well-designed buildings, structures, public spaces and streets to support and promote healthy place-making and quality of life."
- RP-11 "that contributes positively to the character of the settlement"
- RP-17 "support the development of sustainable low-carbon climate resilient communities and to encourage a climate adaptation and mitigation approach to developments which enable regeneration"

# 8.7.4 Chapter 4: Built Heritage

	Likely to	Potential <b>Conflict</b>	Probable	No Likely
	<u>Improve</u>	with status of	Conflict	interaction
	status of	SEOs - likely to be	with	with
	SEOs	mitigated	status of	status of
			SEOs -	SEOs
			unlikely	
			to be	
			mitigated	
	+	-	-	0
Provisions of this Chapter include those relating to built heritage. For more details, please refer to the Plan.		BFF PHH S W MA		
	S W MA A	A C CH L		
	C CH L			

#### Commentary

The assessment of the Plan's Built Heritage provisions against Strategic Environmental Objectives (SEOs BFF, PHH, S, W, MA, A, C, CH and L) is consistent with the:

- Environmental effects detailed under subsections 8.2 to 8.7 of this report; and
- Assessments of the selected alternatives for the Plan provided at Section 7 of this report.

Implementing the Plan will help to direct incompatible development away from the most sensitive areas in the town and focus on directing compact, sustainable development within the existing envelope of the Plan area. Development of these generally more robust, well-serviced and well-connected areas of the town will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development can be accompanied by placemaking initiatives to enable the town to become a more desirable place to live – so that it maintains populations and services. Compatible sustainable development in the town's sensitive areas is also provided for, subject to various requirements relating to environmental protection and management being met.

The provisions in this Chapter of the Plan would contribute towards the Statutory consent granting and decision-making framework for land use developments and activities and sustainable development of the Plan area, in combination with other Plan provisions and other plans, programmes, strategies, etc. Potential adverse environmental effects arising from land use development and activities include in-combination effects arising from services and infrastructure to service development, for example those relating to water services, transport and energy.

The SEA process that is being undertaken alongside the preparation of the Plan has brought about various changes to the emerging Plan through an iterative process. Some of these measures are reproduced under Section 9 "Mitigation Measures" of this report. By integrating SEA recommendations into the Plan, Offaly County Council is helping to ensure that:

- The potential significant adverse effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are avoided, reduced or offset; and
- The beneficial environmental effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are maximised.

The focus of most of the provisions in this Chapter is the protection and management of built heritage - including archaeological and architectural heritage.

# 8.7.5 Chapter 5: Housing

	Likely to	Potential <b>Conflict</b>	Probable	No Likely
	<u>Improve</u>	with status of	<u>Conflict</u>	interaction
	status of	SEOs - likely to be	with	with
	SEOs	mitigated	status of	status of
			SEOs -	SEOs
			unlikely	
			to be	
			mitigated	
	+	-	-	0
Provisions of this Chapter include those relating to housing. For more details, please refer to the Plan.	BFF PHH	BFF PHH S W MA		
	S W MA A	A C CH L		
	C CH L			

#### Commentary

The assessment of the Plan's Housing provisions against Strategic Environmental Objectives (SEOs BFF, PHH, S, W, MA, A, C, CH and L) is consistent with the:

- Environmental effects detailed under subsections 8.2 to 8.7 of this report; and
- Assessments of the selected alternatives for the Plan provided at Section 7 of this report.

Implementing the Plan will help to direct incompatible development away from the most sensitive areas in the town and focus on directing compact, sustainable development within the existing envelope of the Plan area. Development of these generally more robust, well-serviced and well-connected areas of the town will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development can be accompanied by placemaking initiatives to enable the town to become a more desirable place to live – so that it maintains populations and services. Compatible sustainable development in the town's sensitive areas is also provided for, subject to various requirements relating to environmental protection and management being met.

The provisions in this Chapter of the Plan would contribute towards the Statutory consent granting and decision-making framework for land use developments and activities and sustainable development of the Plan area, in combination with other Plan provisions and other plans, programmes, strategies, etc. Potential adverse environmental effects arising from land use development and activities include in-combination effects arising from services and infrastructure to service development, for example those relating to water services, transport and energy.

The SEA process that is being undertaken alongside the preparation of the Plan has brought about various changes to the emerging Plan through an iterative process. Some of these measures are reproduced under Section 9 "Mitigation Measures" of this report. By integrating SEA recommendations into the Plan, Offaly County Council is helping to ensure that:

- The potential significant adverse effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are avoided, reduced or offset; and
- The beneficial environmental effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are maximised.

The provisions in this Chapter of the Plan would contribute towards the sustainable development and the protection and management of the environment, for example:

- RP-01 "...Encourage the compact growth of Edenderry Town and undertake a town centre first approach to ensure that development proceeds sustainably and at an appropriate scale, density and sequence and in line with the County Core Strategy Table."
- RP-03 "... appropriate redevelopment of brownfield and infill sites for residential and mixed uses..."
- RP-08 "That Edenderry, a Self-Sustaining Town, grows at a sustainable level in line with the Core Strategy Table and deliver consolidation and targeted 'catch up' investment in services, infrastructure, amenities and local employment in order to become more self-sustaining."
- RO-01 "...ensure that at least 30% of all new housing development is delivered within the existing built-up footprint of Edenderry Town."

Further to these provisions there are various other provisions in the County Development Plan 2021-2027 with which new development under the Local Area Plan would have to comply with as relevant. For example:

- SSP-03 "encourage the compact growth of settlements... and develop outwards from the centre in a sequential manner."
- SSP-04 "manage the growth of rural areas that are under strong urban influence and stronger rural areas to avoid over-development, whilst sustaining vibrant urban communities".
- SSP-05 "residential development proposals shall be prepared, designed and laid out in accordance with the standards as set out in Chapter 13 Development Management Standards and Section 28 Ministerial Guidelines.... while recognising the need to protect existing residential communities and the established character of the area."
- HP-02 "seek to ensure that groups with special housing needs, such as older people (in accordance with the Age Friendly Strategy for Offaly 2018-2021 and any subsequent editions), single person households, persons with physical and / or learning disabilities, the homeless, the travelling community, asylum seekers and refugees, and those in emergency accommodation are accompanied in a way suitable to their specific needs."
- HP-03 "encourage the reuse of upper floors above commercial premises for residential accommodation."
- HO-01 "develop housing in infill and brownfield sites within town and village centres for social and affordable housing provision"

# 8.7.6 Chapter 6: Biodiversity and Green Infrastructure

	Likely to	Potential <b>Conflict</b>	Probable	No Likely
	<u>Improve</u>	with status of	Conflict	interaction
	status of	SEOs - likely to be	with	with
	SEOs	mitigated	status of	status of
			SEOs -	SEOs
			unlikely	
			to be	
			mitigated	
	+	-	-	0
Provisions of this Chapter include those relating to biodiversity and green infrastructure. For more details, please refer to the Plan.	BFF PHH	BFF PHH S W MA		
	S W MA A	A C CH L		
	C CH L			

#### Commentary

The assessment of the Plan's Biodiversity and Green Infrastructure provisions against Strategic Environmental Objectives (SEOs BFF, PHH, S, W, MA, A, C, CH and L) is consistent with the:

- Environmental effects detailed under subsections 8.2 to 8.7 of this report; and
- Assessments of the selected alternatives for the Plan provided at Section 7 of this report.

Implementing the Plan will help to direct incompatible development away from the most sensitive areas in the town and focus on directing compact, sustainable development within the existing envelope of the Plan area. Development of these generally more robust, well-serviced and well-connected areas of the town will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development can be accompanied by placemaking initiatives to enable the town to become a more desirable place to live – so that it maintains populations and services. Compatible sustainable development in the town's sensitive areas is also provided for, subject to various requirements relating to environmental protection and management being met.

The provisions in this Chapter of the Plan would contribute towards the Statutory consent granting and decision-making framework for land use developments and activities and sustainable development of the Plan area, in combination with other Plan provisions and other plans, programmes, strategies, etc. Potential adverse environmental effects arising from land use development and activities include in-combination effects arising from services and infrastructure to service development, for example those relating to water services, transport and energy.

The SEA process that is being undertaken alongside the preparation of the Plan has brought about various changes to the emerging Plan through an iterative process. Some of these measures are reproduced under Section 9 "Mitigation Measures" of this report. By integrating SEA recommendations into the Plan, Offaly County Council is helping to ensure that:

- The potential significant adverse effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are avoided, reduced or offset; and
- The beneficial environmental effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are maximised.

The focus of most of the provisions in this Chapter is the protection and management of biodiversity – many of the provisions are repeated in Section 9 "Mitigation Measures" of this report.

The development of green infrastructure would facilitate: contributions towards increases in sustainable mobility and reductions in greenhouse gas emissions; increases in flood risk management and protection of human health; protection and management biodiversity and water quality; and protection cultural heritage and landscape sensitivities. The development of green infrastructure also potentially conflicts with most environmental components. This type of infrastructure is often constructed in ecologically and visually sensitive areas adjacent to the banks of rivers and streams. Potential adverse effects would be mitigated both by measures which have been integrated into the Plan which provide for and contribute towards environmental protection, environmental management and sustainable development (including those identified at Section 9 of this report) and by measures arising from lower tier assessments (including those for the preparation of lower tier plans and projects).

# 8.7.7 Chapter 7: Community

	Likely to	Potential <b>Conflict</b>	Probable	No Likely
	<u>Improve</u>	with status of		interaction
	status of	SEOs - likely to be	with	with
	SEOs	mitigated	status of	status of
			SEOs -	SEOs
			unlikely	
			to be	
			mitigated	
	+	-	-	0
Provisions of this Chapter include those relating to community. For more details, please refer to the Plan.		BFF PHH S W MA		
	S W MA A	A C CH L		
	C CH L			

#### Commentary

The assessment of the Plan's Community provisions against Strategic Environmental Objectives (SEOs BFF, PHH, S, W, MA, A, C, CH and L) is consistent with the:

- Environmental effects detailed under subsections 8.2 to 8.7 of this report; and
- Assessments of the selected alternatives for the Plan provided at Section 7 of this report.

Implementing the Plan will help to direct incompatible development away from the most sensitive areas in the town and focus on directing compact, sustainable development within the existing envelope of the Plan area. Development of these generally more robust, well-serviced and well-connected areas of the town will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development can be accompanied by placemaking initiatives to enable the town to become a more desirable place to live – so that it maintains populations and services. Compatible sustainable development in the town's sensitive areas is also provided for, subject to various requirements relating to environmental protection and management being met.

The provisions in this Chapter of the Plan would contribute towards the Statutory consent granting and decision-making framework for land use developments and activities and sustainable development of the Plan area, in combination with other Plan provisions and other plans, programmes, strategies, etc. Potential adverse environmental effects arising from land use development and activities include in-combination effects arising from services and infrastructure to service development, for example those relating to water services, transport and energy.

The SEA process that is being undertaken alongside the preparation of the Plan has brought about various changes to the emerging Plan through an iterative process. Some of these measures are reproduced under Section 9 "Mitigation Measures" of this report. By integrating SEA recommendations into the Plan, Offaly County Council is helping to ensure that:

- The potential significant adverse effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are avoided, reduced or offset; and
- The beneficial environmental effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are maximised.

The provisions in this Chapter of the Plan would contribute towards sustainable development for example:

• CP-01 "Assist, encourage and facilitate the provision and extension of community facilities to serve the specific community needs of all individuals in Edenderry in liaison with community based groups, public bodies, government departments, state agencies and other interested parties."

# 8.7.8 Chapter 8: Climate Action

	Likely to	Potential <b>Conflict</b>	Probable	No Likely
	<u>Improve</u>	with status of	Conflict	interaction
	status of	SEOs - likely to be	with	with
	SEOs	mitigated	status of	status of
			SEOs -	SEOs
			unlikely	
			to be	
			mitigated	
	+	-	-	0
Provisions of this Chapter include those relating to community. For more details, please refer to the Plan.		BFF PHH S W MA		
	S W MA A	A C CH L		
	C CH L			

#### Commentary

The assessment of the Plan's Climate Action provisions against Strategic Environmental Objectives (SEOs BFF, PHH, S, W, MA, A, C, CH and L) is consistent with the:

- Environmental effects detailed under subsections 8.2 to 8.7 of this report; and
- Assessments of the selected alternatives for the Plan provided at Section 7 of this report.

Implementing the Plan will help to direct incompatible development away from the most sensitive areas in the town and focus on directing compact, sustainable development within the existing envelope of the Plan area. Development of these generally more robust, well-serviced and well-connected areas of the town will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development can be accompanied by placemaking initiatives to enable the town to become a more desirable place to live – so that it maintains populations and services. Compatible sustainable development in the town's sensitive areas is also provided for, subject to various requirements relating to environmental protection and management being met.

The provisions in this Chapter of the Plan would contribute towards the Statutory consent granting and decision-making framework for land use developments and activities, and sustainable development of the Plan area, in combination with other Plan provisions and other plans, programmes, strategies, etc. These include:

- The Climate Action Plan that identifies 475 climate mitigation and/or adaptation actions.
- The National Planning Framework, which has identified National Strategic Outcome Objectives 8 "Build Climate Resilience" and 9 "Support the transition to low carbon and clean energy" under National Strategic Outcome 8 "Transition to a Low Carbon and Climate Resilient Society".
- The Eastern and Midland Regional Spatial and Economic Strategy that has identified various Regional Policy Objectives relating to climate action, including 7.32 "With the assistance and support of the Climate Action Regional Offices, local authorities shall develop, adopt and implement local climate adaptation and mitigation strategies which shall address issues including local vulnerability to climate risks and identify and prioritise actions, in accordance with the guiding principles of the National Adaptation Framework, National Mitigation Plan.", 7.35 "EMRA shall, in conjunction with local authorities in the Region, identify Strategic Energy Zones as areas suitable for larger energy generating projects, the role of community and micro energy production in urban and rural settings and the potential for renewable energy within industrial areas. The Strategic Energy Zones for the Region will ensure all environmental constraints are addressed in the analysis. A regional landscape strategy should be developed to support delivery of projects within the Strategic Energy Zones." and "Local authorities shall include policies in statutory land use plans to promote high levels of energy conservation, energy efficiency and the use of renewable energy sources in existing buildings, including retro fitting of energy efficiency measures in the existing building stock and energy efficiency in traditional buildings. All new buildings within the Region will be required to achieve the Nearly Zero-Energy Buildings (NZEB) standard in line with the Energy Performance of Buildings Directive (EPBD)."

Provisions relating to energy, would contribute towards achieving various government objectives and targets including those relating to energy security, climate mitigation and reducing greenhouse gas emissions and increasing the amount of energy to be consumed from renewable sources. Further general commentary on the types of potential effects arising from certain renewable energy types is provided below.

#### Bio-Energy

Positive Effects: Contribution towards renewable energy and minimisation of greenhouse gases targets. Can provide for the use of agricultural and other wastes Potential Negative Effects, if unmitigated:

- Potential impact upon designated and non-designated biodiversity and flora and fauna arising from changes in vegetation. Soil structure may also be impacted upon.
- Changes in farming practices may lead to changes in drainage and runoff which could impact upon biological and chemical status of waters - this could interact with drinking water sources and biodiversity
- Potential human health impact; odour and noise from operation of plants
- Potential impacts upon traffic during operation due to transportation of fuel to plants
- Fuels derived from bio-mass still produce emissions however these are less than those derived from fossil fuels
- · Changes to the land cover of areas could occur however visual impacts would depend on perception of the relevant area;
- Biomass plants may have visual impacts these would depend on perception of the relevant area

#### Geothermal Energy

Positive Effects: Contribution towards renewable energy and minimisation of greenhouse gases targets

Potential Negative Effects, if unmitigated:

- Potential impacts upon the status of waters and ecology contained within, especially arising from changes in the temperature of groundwater which can impact upon the structure and ecology of the aquifer and any dependent surface waters this could interact with drinking water sources
- Potential interactions leading to change in structure of soil and geology

- · Potential impacts upon archaeology, including unknown underground archaeology
- Potential impacts upon on site water services
- Potential impacts upon context of archaeological and architectural heritage arising from surface installation
- Large scale installations may have visual impacts these would depend on perception of the relevant area

#### Hydro-Energy

Positive Effects: Contribution towards renewable energy and minimisation of greenhouse gases targets

#### Potential Negative Effects, if unmitigated:

- Depending on the scale and location of the development there is potential for impacts to occur on biodiversity, in particular aquatic biodiversity
- Potential to impact upon the morphological, biological and chemical status of waters this could interact with drinking water sources (in freshwater) and biodiversity
- Potential interactions leading to change in structure of soil and geology
- Operation could impact upon flood risk elsewhere
- Potential impacts upon archaeological heritage or nearby architectural heritage, including context
- Changes to the character of locations may occur however visual impacts would depend upon, inter alia, the size of the installation, ancillary facilities and the perception and visibility of the relevant area

#### Solar Energy and Solar Thermal Energy

Positive Effects: Contribution towards renewable energy and minimisation of greenhouse gases targets

#### Potential Negative Effects, if unmitigated:

- Potential impacts on architectural heritage including the context of this heritage at micro scale
- Potential impacts on habitats and species and micro scale
- Large scale installations may have visual impacts these would depend on perception of the relevant area -, however these are unlikely to be provided for

#### Waste to Energy

Positive Effects: Contribution towards renewable energy and minimisation of greenhouse gases targets. Meets waste management objectives

#### Potential Negative Effects, if unmitigated:

- Potential odour issues
- Construction of facilities can result in impacts similar to other built development potential visual impact, impact on ecology, waters
- Design needs to ensure that emissions comply with relevant standards

#### Wind Energy

Positive Effects: Contribution towards renewable energy and minimisation of greenhouse gases targets

#### Potential Negative Effects, if unmitigated:

- Potential impacts include those associated with construction and operation of the turbines and ancillary facilities and infrastructure (including roads and electrical infrastructure)
- · Potential human health impact: shadow flicker, noise, and impacts arising from bog bursts and landslides
- Potential impact upon designated and non-designated biodiversity and flora and fauna including birdlife
- Potential interactions leading to change in structure of soil and geology and changes to drainage
- Potential impacts on water status during construction this could interact with drinking water sources and biodiversity
- Potential impacts upon the context of protected archaeological and architectural heritage including the context of this heritage as well as unknown archaeological heritage
- Potential impacts upon traffic during construction due to transportation of turbine components
- Changes to the character of areas would be likely to occur however visual impacts would depend on various factors including the size, number and spacing of the turbines, perception of the relevant areas and any cumulative effect arising from multiple wind farms

The development of green infrastructure would facilitate: contributions towards increases in sustainable mobility and reductions in greenhouse gas emissions; increases in flood risk management and protection of human health; protection and management biodiversity and water quality; and protection cultural heritage and landscape sensitivities. The development of green infrastructure also potentially conflicts with most environmental components. This type of infrastructure is often constructed in ecologically and visually sensitive areas adjacent to the banks of rivers and streams. Potential adverse effects would be mitigated both by measures which have been integrated into the Plan which provide for and contribute towards environmental protection, environmental management and sustainable development (including those identified at Section 9 of this report) and by measures arising from lower tier assessments (including those for the preparation of lower tier plans and projects).

Provisions relating to the management of flood risk and surface water drainage would benefit the protection of human health, biodiversity, flora and fauna, cultural heritage, water status and existing infrastructure and services. Flood risk management infrastructure (if required) has the potential to result in significant adverse environmental effects during construction and operation on most environmental components. These types of infrastructure are often constructed in ecologically and visually sensitive areas and adjacent to the banks of rivers and streams. Potential adverse effects will be mitigated both by measures which have been integrated into the Plan (including those identified at Section 9 of this report) and by measures arising from lower tier assessments.

The SEA process that is being undertaken alongside the preparation of the Plan has brought about various changes to the emerging Plan through an iterative process. Some of these measures are reproduced under Section 9 "Mitigation Measures" of this report. By integrating SEA recommendations into the Plan, Offaly County Council is helping to ensure that:

- The potential significant adverse effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are avoided, reduced or offset; and
- The beneficial environmental effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are maximised.

The focus of most of the provisions in this Chapter is climate action – many of the provisions are repeated in Section 9 "Mitigation Measures" of this report. Please also refer to Section 8.5 "Interactions with Climate Mitigation and Adaptation".

# 8.7.9 Chapter 9: Critical Infrastructure

	Potential <u>Conflict</u> with status of SEOs - likely to be	<u>Conflict</u>	No Likely interaction with
SEOs		status of	status of
		SEOs - unlikely to be	SEOs
+	_	mitigated -	0
BFF PHH S W MA A	BFF PHH S W MA		

#### Commentary

The assessment of the Plan's Critical Infrastructure provisions against Strategic Environmental Objectives (SEOs BFF, PHH, S, W, MA, A, C, CH and L) is consistent with the:

- Environmental effects detailed under subsections 8.2 to 8.7 of this report; and
- Assessments of the selected alternatives for the Plan provided at Section 7 of this report.

Implementing the Plan will help to direct incompatible development away from the most sensitive areas in the town and focus on directing compact, sustainable development within the existing envelope of the Plan area. Development of these generally more robust, well-serviced and well-connected areas of the town will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development can be accompanied by placemaking initiatives to enable the town to become a more desirable place to live – so that it maintains populations and services. Compatible sustainable development in the town's sensitive areas is also provided for, subject to various requirements relating to environmental protection and management being met.

The provisions in this Chapter of the Plan would contribute towards the Statutory consent granting and decision-making framework for land use developments and activities and sustainable development of the Plan area, in combination with other Plan provisions and other plans, programmes, strategies, etc. Potential adverse environmental effects arising from land use development and activities include in-combination effects arising from services and infrastructure to service development, for example those relating to water services, transport and energy.

The SEA process that is being undertaken alongside the preparation of the Plan has brought about various changes to the emerging Plan through an iterative process. Some of these measures are reproduced under Section 9 "Mitigation Measures" of this report. By integrating SEA recommendations into the Plan, Offaly County Council is helping to ensure that:

- The potential significant adverse effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are avoided, reduced or offset; and
- The beneficial environmental effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are maximised.

The provisions in this Chapter of the Plan would contribute towards the planning framework for the future development of sustainable transport and movement within and beyond the Plan area (including relating to delivery of the infrastructure and services proposed in the Local Transport Plan), in combination with the implementation of other provisions from the Plan and other plans and programmes. Many of these provisions would primarily contribute towards maximising sustainable mobility and associated interactions with emissions to air (including noise and greenhouse gas emissions), energy usage, air quality and human health. The facilitation of journeys by car, in particular, would give rise to emissions to air.

The development of new and existing greenways, blueways, trails and walking and cycling routes has the potential to contribute towards sustainable mobility and a better management of mobility and tourism in sensitive areas, thereby benefitting various environmental components including habitats at certain locations. The development of these projects, however, presents a variety of potentially adverse environmental effects that would, if unmitigated, have the potential to arise from both the construction and operation of such developments and/or their ancillary infrastructure. These types of infrastructure are often constructed in ecologically and visually sensitive areas adjacent to the banks of rivers and streams. Potential adverse effects would be mitigated both by measures which have been integrated into the Plan which provide for and contribute towards environmental protection, environmental management and sustainable development (including those identified at Section 9 of this report) and by measures arising from lower tier assessments (including those for the preparation of lower tier plans and projects). Policy CIP-05 is to "Ensure that new cycling and walking infrastructure, including the provision of new cycling hubs / parks, shall be provided subject to environmental constraints, including those related to habitats and potential impacts such as disturbance from lighting: this will include minimising river crossings, avoiding sensitive habitats, not increasing barriers to flood waters and sustainable design and construction techniques."

Chapter 8.6.4 "Corridor & Route Selection Process"52 of the County Development Plan 2021-2027 would need to be complied with by new projects as relevant.

Provisions relating to water resources and services would, by protecting water resources, appropriately treating waste water and providing safe drinking water, contribute towards the protection of various environmental components including: human health, biodiversity and flora and fauna, the status of waters, flood risk management and soil. There would be potential for significant adverse environmental effects upon various environmental components to arise during construction of water services infrastructure. Such potential significant adverse effects could also arise during operation: the protection of human health, biodiversity and flora and fauna and the status of waters, could all be conflicted with by outflows and abstractions.

The focus of most of the provisions in this Chapter is the protection and management of the town's environment, including through the provision of critical infrastructure.

# 8.7.10 Chapter 10: Planning and Infrastructural Assessment

	Likely to	Potential <b>Conflict</b>	Probable	No Likely
	<u>Improve</u>			interaction
	status of	SEOs - likely to be	with	with
	SEOs	mitigated	status of	status of
			SEOs -	SEOs
			unlikely	
			to be	
			mitigated	
	+	-	-	0
Provisions of this Chapter include those relating to planning and infrastructural assessment. For more details, please refer to the Plan.		BFF PHH S W MA		
	S W MA A	A C CH L		
	C CH L			

#### Commentary

The assessment of the Plan's Planning and Infrastructural Assessment provisions against Strategic Environmental Objectives (SEOs BFF, PHH, S, W, MA, A, C, CH and L) is consistent with the:

- Environmental effects detailed under subsections 8.2 to 8.7 of this report; and
- Assessments of the selected alternatives for the Plan provided at Section 7 of this report.

Implementing the Plan will help to direct incompatible development away from the most sensitive areas in the town and focus on directing compact, sustainable development within the existing envelope of the Plan area. Development of these generally more robust, well-serviced and well-connected areas of the town will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development can be accompanied by placemaking initiatives to enable the town to become a more desirable place to live – so that it maintains populations and services. Compatible sustainable development in the town's sensitive areas is also provided for, subject to various requirements relating to environmental protection and management being met.

The provisions in this Chapter of the Plan would contribute towards the Statutory consent granting and decision-making framework for land use developments and activities and sustainable development of the Plan area, in combination with other Plan provisions and other plans, programmes, strategies, etc. Potential adverse environmental effects arising from land use development and activities include in-combination effects arising from services and infrastructure to service development, for example those relating to water services, transport and energy.

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<sup>52</sup> The following Corridor and Route Selection Process will be undertaken for relevant new infrastructure, however this would not apply to national road schemes which are progressed in accordance with statutory processes and TII publications, including various TII Planning Guidelines for Assessment of Environmental Impacts that include headings such as "Constraints Study", "Route Corridor Selection" and "Environmental Impact Assessment:

Stage 1 – Route Corridor Identification, Evaluation and Selection

<sup>•</sup> Environmental constraints (including those identified in Section 4 of the accompanying SEA Environmental Report) and opportunities (such as existing linear infrastructure) will assist in the identification of possible route corridor options;

Potentially feasible corridors within which infrastructure could be accommodated will be identified and these corridors assessed. The selection of the preferred route corridor will avoid constraints and meet opportunities to the optimum extent, as advised by the relevant specialists; and

In addition to the constraints identified above, site-specific field data may be required to identify the most appropriate corridors.

Stage 2 - Route Identification, Evaluation and Selection

Potentially feasible routes within the preferred corridor will be identified and assessed. The selection of preferred routes will avoid constraints and meet opportunities to the optimum extent, as advised by the relevant specialists, taking into account project level information and potential mitigation measures that are readily achievable;

In addition to the constraints identified above, site specific field data may be required to identify the most appropriate routes; and

The SEA process that is being undertaken alongside the preparation of the Plan has brought about various changes to the emerging Plan through an iterative process. Some of these measures are reproduced under Section 9 "Mitigation Measures" of this report. By integrating SEA recommendations into the Plan, Offaly County Council is helping to ensure that:

- The potential significant adverse effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are avoided, reduced or offset; and
- The beneficial environmental effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are maximised.

The provisions in this Chapter of the Plan will help to contribute towards sustainable development and environmental protection and management by facilitating the phasing of new development to ensure that it occurs in a sequential and efficient manner and in tandem with the delivery of supporting physical and social infrastructure.

# 8.7.11 Chapter 11: Land Use Zoning Objectives

	Likely to	Potential <b>Conflict</b>	Probable	No Likely
	<u>Improve</u>			interaction
	status of	SEOs - likely to be	with	with
	SEOs	mitigated	status of	status of
			SEOs -	SEOs
			unlikely	
			to be	
			mitigated	
	+	-	-	0
Provisions of this Chapter include those relating to land use zoning. For more details, please refer to the Plan.	BFF PHH			
	S W MA A	A C CH L		
	C CH L			

#### Commentary

The assessment of the Plan's Land Use Zoning Objectives provisions against Strategic Environmental Objectives (SEOs BFF, PHH, S, W, MA, A, C, CH and L) is consistent with the:

- Environmental effects detailed under subsections 8.2 to 8.7 of this report; and
- Assessments of the selected alternatives for the Plan provided at Section 7 of this report.

Implementing the Plan will help to direct incompatible development away from the most sensitive areas in the town and focus on directing compact, sustainable development within the existing envelope of the Plan area. Development of these generally more robust, well-serviced and well-connected areas of the town will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development can be accompanied by placemaking initiatives to enable the town to become a more desirable place to live – so that it maintains populations and services. Compatible sustainable development in the town's sensitive areas is also provided for, subject to various requirements relating to environmental protection and management being met.

The provisions in this Chapter of the Plan would contribute towards the Statutory consent granting and decision-making framework for land use developments and activities and sustainable development of the Plan area, in combination with other Plan provisions and other plans, programmes, strategies, etc. Potential adverse environmental effects arising from land use development and activities include in-combination effects arising from services and infrastructure to service development, for example those relating to water services, transport and energy.

The SEA process that is being undertaken alongside the preparation of the Plan has brought about various changes to the emerging Plan through an iterative process. Some of these measures are reproduced under Section 9 "Mitigation Measures" of this report. By integrating SEA recommendations into the Plan, Offaly County Council is helping to ensure that:

- The potential significant adverse effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are avoided, reduced or offset; and
- The beneficial environmental effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are maximised.

Environmental considerations were integrated into the Local Area Plan's zoning through an interdisciplinary approach which was informed by the environmental considerations identified by the SEA, AA and SFRA processes.

Zoning has been applied in a way that primarily seeks to achieve sustainable and compact growth, taking into account the various requirements set out in the higher-level NPF, Eastern and Midland RSES and Offaly County Development Plan 2021-2027.

The detailed Plan preparation process undertaken by the Planning Department combined with specialist input from the SFRA process facilitated zoning that helps to avoid inappropriate development being permitted in areas of high flood risk. Also taken into account were environmental sensitivities relating to ecology, cultural heritage, landscape and water.

# 8.7.12 Chapter 12: Implementation and Monitoring

	Likely to	Potential <b>Conflict</b>	Probable	No Likely
	<u>Improve</u>	with status of	<u>Conflict</u>	interaction
	status of	SEOs - likely to be	with	with
	SEOs	mitigated	status of	status of
			SEOs -	SEOs
			unlikely	
			to be	
			mitigated	
	+	-	-	0
Provisions of this Chapter include those relating to implementation and monitoring. For more details, please refer to the Plan.		BFF PHH S W MA		
	_	A C CH L		
	C CH L			

#### Commentary

The assessment of the Plan's Implementation and Monitoring provisions against Strategic Environmental Objectives (SEOs BFF, PHH, S, W, MA, A, C, CH and L) is consistent with the:

- Environmental effects detailed under subsections 8.2 to 8.7 of this report; and
- Assessments of the selected alternatives for the Plan provided at Section 7 of this report.

Implementing the Plan will help to direct incompatible development away from the most sensitive areas in the town and focus on directing compact, sustainable development within the existing envelope of the Plan area. Development of these generally more robust, well-serviced and well-connected areas of the town will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development can be accompanied by placemaking initiatives to enable the town to become a more desirable place to live – so that it maintains populations and services. Compatible sustainable development in the town's sensitive areas is also provided for, subject to various requirements relating to environmental protection and management being met.

The provisions in this Chapter of the Plan would contribute towards the Statutory consent granting and decision-making framework for land use developments and activities and sustainable development of the Plan area, in combination with other Plan provisions and other plans, programmes, strategies, etc. Potential adverse environmental effects arising from land use development and activities include in-combination effects arising from services and infrastructure to service development, for example those relating to water services, transport and energy.

The SEA process that is being undertaken alongside the preparation of the Plan has brought about various changes to the emerging Plan through an iterative process. Some of these measures are reproduced under Section 9 "Mitigation Measures" of this report. By integrating SEA recommendations into the Plan, Offaly County Council is helping to ensure that:

- The potential significant adverse effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are avoided, reduced or offset; and
- The beneficial environmental effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are maximised.

Monitoring the implementation of the Plan as set out in Chapter 12 of the Plan will be supplemented by environmental monitoring as set out in Section 10 of this SEA Environmental Report.

# **Section 9** Mitigation Measures

# 9.1 Introduction

Mitigation measures are measures envisaged to prevent, reduce and, as fully as possible, offset any significant adverse impacts on the environment of implementing the Plan. Various environmental sensitivities and issues have been communicated to the Council through the SEA, Appropriate Assessment (AA) and Strategic Flood Risk Assessment (SFRA) processes. By integrating all related recommendations into the Plan, the Council have ensured that both the beneficial environmental effects of implementing the Plan have been and will be maximised and that potential adverse effects have been and will be avoided, reduced or offset.

Mitigation was achieved through the:

- Strategic work undertaken by the Council to ensure contribution towards environmental protection and sustainable development;
- Considering alternatives for the Plan;
- Integration of environmental considerations into zoning provisions of the Plan;
- Integration of individual SEA, AA and SFRA provisions into the text of the Plan; and
- Integration of individual provisions into the text of the County Development Plan.

# 9.2 Strategic work undertaken by the Council to ensure contribution towards environmental protection and sustainable development

Far in advance of the placing of the Draft Plan on public display, Offaly County Council undertook various works in order to inform the preparation of the Plan.

The findings of this strategic work have been integrated into the Plan and will contribute towards both environmental protection and management and sustainable development.

The following Edenderry specific non-statutory plans and studies were taken into account in the preparation of the LAP:

- · Edenderry Local Transport Plan; and
- Blundell Masterplan.

The undertaking of this SEA process was part of this strategic work and contributed towards the integration of environmental considerations into individual Plan provisions.

# 9.3 Consideration of Alternatives

Although strategic alternatives in relation to the content of the Plan were significantly limited for the Plan (see Section 6), as part of the Plan preparation/SEA process, the Council considered a number of alternatives for the Plan.

These alternatives were assessed by the SEA process (see Section 7) and the findings of this assessment informed the selection of preferred alternatives, facilitating an informed choice with respect to the type of Plan that was prepared and placed on public display.

# 9.4 Integration of environmental considerations into Zoning of the Plan

Environmental considerations were integrated into the Local Area Plan's zoning through an interdisciplinary approach which was informed by the environmental considerations identified by the SEA, AA and SFRA processes.

Zoning has been applied in a way that primarily seeks to achieve sustainable and compact growth, taking into account the various requirements set out in the higher-level NPF, Eastern and Midland RSES and Offaly County Development Plan 2021-2027.

The detailed Plan preparation process undertaken by the Planning Department combined with specialist input from the SFRA process facilitated zoning that helps to avoid inappropriate development being permitted in areas of high flood risk. Also taken into account were environmental sensitivities relating to ecology, cultural heritage, landscape and water.

# 9.5 Integration of individual provisions into the text of the Draft Plan

Various provisions have been integrated into the text of the Draft Plan through the Plan-preparation and SEA, SFRA and AA processes. Both the Planning and the assessment teams contributed towards the mitigation which was developed over multiple iterations and was informed by, inter alia, various communications through the SEA, AA and SFRA processes.

Table 9.1 links key mitigation measure(s) to the likely significant effects of implementing the Plan, if unmitigated. The measures generally benefit multiple environmental components i.e. a measure providing for the protection of biodiversity, flora and fauna could beneficially impact upon the minimisation of flood risk and the protection of human health, for example.

# 9.6 Integration of individual provisions into the text of the County Development Plan

In addition to the individual provisions integrated into the text of the Draft Local Area Plan, individual provisions relating to environmental protection and management have been integrated into the existing Offaly County Development Plan 2021-2027. These measures, which must be complied with by development under the Local Area Plan, are identified alongside the Local Area Plan measures on Table 9.1.

# 9.7 Further Mitigation

Flood risk management and drainage provisions are already in force through the County Development Plan and related provisions have been integrated into the LAP. In addition, land use zoning contained within the Draft Plan has been informed by the SFRA process and associated delineation of flood risk zones. Further refinement of the land use zoning will be undertaken after public display to ensure compliance with the Flood Risk Management Guidelines.

Additional text-based measures to be considered for integration into the Plan following public display:

- 1. Maintain and enhance the existing surface water drainage systems in Edenderry and to contribute towards protection and improvement of surface (including Weaver's Drain and the River Boyne) and ground water quality in accordance with the Water Framework Directive.
- 2. Applications for development under the Plan must demonstrate that the proposal for development would not adversely affect a water body's ability to meet its objectives under

the Water Framework Directive, individually as a result of the proposed development or cumulatively, in combination with other developments.

- 3. To make reference to the Section 3.5 of the accompanying SFRA, "Sustainable Urban Drainage Systems and Surface Water Guidance and Strategy".
- 4. To seek to ensure the sustainable and responsible management of coarse fishing activities within the Boyne River, in collaboration with Inland Fisheries Ireland, with regard to the Salmonid River Regs (S.I. No. 293/1988) and the Habitats Directive in order to help maintain the conservation objectives for Salmon (Salmo salar), which is Qualifying Interest No. 1106 of the River Boyne and Blackwater SAC.
- 5. To seek to ensure the sustainable and appropriate management of water-based activities and developments along or within the River Boyne, which is hydrologically connected to the River Boyne and Blackwater SAC). This may include the preparation and implementation of visitor management plans and/or Appropriate Assessment under the Habitats Directive if there is a possibility that the activities/developments would negatively affect the Conservation Objectives of any of the Qualifying Interests of the River Boyne and Blackwater SAC.

Objectives

To adhere to the land use zoning objectives

contained in this Plan in the interests of orderly

development and eliminating potential conflicts

between incompatible land uses.

Topic	Potentially Significant Adverse Effect, if Unmitigated	Draft Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
All	Various	Strategic Aim 1: Economic Development To successfully fulfil Edenderry's role as a self- sustaining town by embracing the transition to a low carbon and climate resilient model of development while seeking to utilise and invest in the town's existing economic, social and environmental assets to generate sustainable economic development and job creation, thereby enhancing its status as the main business, service, employment, social, cultural, tourism and recreational hub for everyone in east Offaly and ensuring it is an attractive place to live, work and visit.  Strategic Aim 2: Town Centre and Regeneration To sensitively and sustainably enhance the historic town centre through the provision of healthy place-making. To facilitate a competitive and healthy retail environment and to support the future vitality, diversity and viability of Edenderry. These aims will improve the attractiveness and functionality of Edenderry	<ul> <li>corridors assessed. The selection of the preferred route corridor will avoid constraints and meet opportunities to the optimum extent, as advised by the relevant specialists; and</li> <li>In addition to the constraints identified above, site-specific field data may be required to identify the most appropriate corridors.</li> <li>Stage 2 – Route Identification, Evaluation and Selection</li> <li>Potentially feasible routes within the preferred corridor will be identified and assessed. The selection of preferrer routes will avoid constraints and meet opportunities to the optimum extent, as advised by the relevant specialists taking into account project level information and potential mitigation measures that are readily achievable;</li> <li>In addition to the constraints identified above, site specific field data may be required to identify the most appropriate routes; and</li> <li>In addition to environmental considerations, the identification of route corridors and the refinement of route lines is likely to be informed by other considerations.</li> </ul>
		as a place in which to live, work and visit.  Strategic Aim 4: Residential  Deliver high quality housing in terms of design, scale, mix, tenure, sequence and density to reasonable match the requirements of the different categories of households which shall be constructed on the principles of universal design, life-long adaptability and energy efficiency, and developed in a manner which promotes compact growth and healthy place-making and is in line with the Core Strategy in the County Development Plan.  Strategic Aim 6: Community  Promote Edenderry as a town where people can live and work, with access to a range of community facilities and events that are vital for social inclusion and quality of life for all.  Strategic Aim 10: Land Use Zoning	Chapter 11.5.2 Waste Management Construction Environment Management Plans (CEMPs) shall be prepared for larger scale projects and this requirement shall be assessed on a case by case basis as part of the development management process. Such plans shall incorporate relevant mitigation measures contained in any accompanying Environmental Impact Assessment Report or Appropriat Assessment and in this Development Plan. CEMPs shall typically provide details of intended construction practice for the proposed development, including where applicable:  • Location and details of site compounds, refuse storage areas, construction site offices and state facilities, site security fencing and hoardings, on-site staff car parking;  • Details of construction traffic - timing and routing, directional signage, measures to obviate queuing alternative arrangements for pedestrians and vehicles, and measures to prevent the spillage or deposit of clar rubble or other debris;  • Details of appropriate mitigation measures for noise, dust and vibration, and monitoring of succeived levels;  • Containment of all construction-related fuel and oil within specially constructed bunds to ensure the fuel spillages are fully contained; such bunds shall be roofed to exclude rainwater;  • Disposal of construction/demolition waste and details of how it is proposed to manage excavate soil, including compliance with 2006 Best Practice Guidelines on the Preparation of Waste Management Plar for Construction and Demolition Projects, Department of the Environment;

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A water and sediment management plan, providing for means to ensure that surface water runoff is

Measures adopted during construction to prevent the spread of invasive species (such as Japanese

If peat is encountered - a peat storage, handling and reinstatement management plan;

controlled such that no silt or other pollutants enter local water courses or drains;

Details of a water quality monitoring and sampling plan;

Topic Potentially Significant Adverse Effe if Unmitigated		Existing Offaly County Development Plan 2021-2027 measures, including
	Strategic Aim 11: Implementation and Monitoring  To implement in conjunction with key stakeholders, the objectives of this Local Area Plan, with a particular focus on the key strategic objectives, and to monitor same.  TCP-13 Incorporate Sustainable Urban Drainage Systems (SuDS) and other nature-based solutions in accordance with the 'Nature-based Solutions to the Management of Rainwater and Surface Water Runoff in Urban Areas – Best Practice Interim Guidance Document, 2022' and any subsequent editions.  TCP-06 Ensure that growth planned for Edenderry town over the life of the Plan occurs in a sustainable and sequential manner, characterised by a compact, consolidated and permeable pattern of development linked by sustainable modes of transport including a robust network of pedestrian and cycle routes.  TCP-12 Support the development of sustainable low-carbon climate resilient communities and encourage a climate adaptation and mitigation approach to developments, which will enable regeneration.  TCP-04 Encourage and facilitate the appropriate reuse and regeneration of derelict, vacant, backland and underutilised lands and buildings, including large rear gardens, in the town centre for retail, residential and other mixed uses, through the co-operation of adjoining landowners and/ or through legislative measures and / or by supporting the progression and delivery of projects funded by the Rural Regeneration and Development Fund and other appropriate funds. This may include for the creation of new streets and / or cohesive developments.  RP-01 Encourage the compact growth of Edenderry Town and undertake a town centre first approach to ensure that development proceeds sustainably and at an appropriate scale, density and sequence and in line with the County Core Strategy Table.  RP-03 Encourage the appropriate redevelopment of brownfield and infill sites for	Notweed):  • Appointment of an ecological clerk of works at site investigation, preparation and construction phases; and  Details of appropriate mitigation measures for lighting specifically designed to minimise impacts to biodiversity, including bats.  DMS-107 (Undergrounding of Services)  All services, including ESB, telephone and television cables shall be placed underground, where possible. Service buildings or structures shall be sited as unobtrusively as possible and must be screened.  Proposals should demonstrate that environmental impacts including the following are minimised:  • Habitat loss as a result of removal of field boundaries and hedgerows (right of way preparation) followed by topsoil stripping (to ensure machinery does not destroy soil structure and drainage properties):  • Short to medium-term impacts on the landscape where, for example, hedgerows are encountered;  • Impacts on soil structure and drainage; and  • Impacts on soil structure and drainage; and  • Impacts on soil structure and drainage; and  • Impacts on soil structure and resinage; and  • Impacts on soil structure and resinage; and  • Impacts on soil structure and Existing Infrastructural Assets)  It is Council policy to require that environmental assessments should address reasonable alternatives for the location of new energy developments, and where existing infrastructural assets sub-stations, power lines and roads already exist within the proposed development areas, then such assets should be considered for sustainable use by the proposed development where the assets have capacity to absorb the new development.  Chapter 12.1 (Environmental considerations and Limitations in the types of uses)  There are a wide range of land uses identified under each of the Land Use Zoning Objectives. Proposals for development will need to demonstrate compliance with the various written provisions of the Plan, as relevant, including those relating to environmental protection and management. Environmental considerations, such as those related

Topic Potentially Significant Adverse Effect, if Unmitigated Draft Local Area Plan measures, including the property of the pro	Existing Offaly County Development Plan 2021-2027 measures, including
residential and mixed uses within the exist built-up footprint of Edenderry Town.  RP-08 That Edenderry, a Self-Sustaining To grows at a sustainable level in line with the Strategy Table and deliver consolidation targeted 'catch up' investment in servinfrastructure, amenities and local employr in order to become more self-sustaining.  RO-01 In line with the requirements of National Planning Framework, ensure tha least 30% of all new housing development delivered within the existing built-up footpring to the proposed of National Planning Framework, ensure that least 30% of all new housing development delivered within the existing proportion of All new housing development delivered within the requirements of National Planning Framework, ensure that least 30% of all new housing development delivered within the existing proportion for the proposed.  RO-01 In line with the requirements of National Planning Framework, ensure that least 30% of all new housing development delivered within the existing provided 'catch up' investment in servinfrastructure, amenities and least 30% of all new housing development delivered within the existing provided 'catch up' investment in servinfrastructure, amenities and least 30% of all new housing development delivered within the existing provided 'catch up' investment in servinfrastructure, and least 30% of all new housing development delivered within the existing provided 'catch up' investment in servinfrastructure, amenities and least 30% of all new housing development of Roton in providing regilement of the following:  Provision of open space amenities;  Sustainable management of water;  Protection of protected landscape sensitivities;  Strategic Aim 5: Biodiversity and creation of cultural heritage; and protection of cultural heritage; and protection of cultural heritage; and protection of cultural heritage; and sociated infrastructure:  Protection of cultural heritage; and agriculiand, while maintaining ecosystem services improving resilience to climate change.  TCP-16 Seek a s	Ses.  Various Designated and Non-Designated Sites Policies and Objectives (BLP-01 to 07 and BLO-02 to 06) It is Council policy to protect, conserve, and seek to enhance the county's biodiversity and ecological connectivity. It is Council policy to conserve and protect habitats and species listed in the Annexes of the EU Habitats Directive (92/43/EEC) (as amended) and the Birds Directive (2009/147/EC), the Wildlife Acts 1976 (as amended) and the Flora Protection Orders.  It is Council policy to support and co-operate with statutory authorities and others in support of measures taken to manage proposed or designated sites in order to achieve their conservation objectives.  It is Council policy to ensure that development does not have a significant adverse impact, incapable of satisfactory avoidance or mitigation, on plant, animal or bird species protected by law.  It is Council policy to support the mplementation of the National Biodiversity Action Plan 2017-2021 and the Offaly Heirtage Plan Key Actions 2017-2021 and future editions in partnership with relevant stakeholders subject to available resources.  It is Council policy to work with all state agencies to promote the development of all aspects of park management in the

Topic Potentiall Significan Adverse if Unmitig	t Effect,	Draft Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
disturbar biodivers flora and Habitat fragment and deteriora including size and effects; a Disturbal (e.g. of noise lighting transport corridors displacer protected species birds swifts) bats.	ity and fauna; loss, tation tion, patch dege and nce fue to and along to and ment of definition.	be harmful to or that would result in a significant deterioration of habitats and/or disturbance of protected species within Edenderry and to support/co-operate with statutory authorities and others in support of measures taken to manage proposed or designated sites in order to achieve their conservation objectives.  BGIP-03 Support the role that biodiversity and green infrastructure plays in the Plan Area in relation to ecosystem services along with climate change mitigation and adaptation.  BGIP-04 Promote the protection and preservation of existing hedgerows and to encourage planting of native hedgerow and tree species.  BGIO-01 Further develop an integrated and coherent Green Infrastructure network for the Plan Area by requiring the retention of substantial networks of green space in urban, urban fringe and adjacent countryside areas to serve the needs of communities now and in the future including the need to adapt to and mitigate climate change.  BGIO-02 Integrate existing green infrastructure as shown in Figure 6.4 and potential GI projects as shown in Figure 6.13 as an essential component of all new developments and to discourage development that would fragment, damage or prejudice the integrity of the green infrastructure network.  BGIO-03 Promote a network of pedestrian and cycle paths to enhance accessibility to the green infrastructure network, while ensuring that the design and operation of the routes responds to the ecological protection needs of each site, including the undertaking of Appropriate Assessment where relevant.  BGIO-04 Provide a Linear park adjacent to the River Boyne at Kishowanny and to provide an eco-friendly looped walkway or nature trail along the river bank.  BGIO-05 In conjunction with the appropriate prescribed bodies, to investigate the feasibility of providing Wetland Amenity Area at locations shown on Figure 6.13 taking into account the environmental sensitivities of the site and Inland	requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted on the basis of this Plan (either individually or in combination with other plans, programmes, etc. or projects.)  It is an objective of the Council that all projects and plans arising from this Plan will be screened for the need to undertake Appropriate Assessment under Article 6 of the Habitats Directive. A plan or project will only be authorised after the competent authority has ascertained, based on scientific evidence, Screening for Appropriate Assessment, and subsequent Appropriate Assessment under Article 6 of the Habitats Directive. A plan or project will only be authorised after the competent authority has ascertained, based on scientific evidence, Screening for Appropriate Assessment, and subsequent Appropriate Assessment, and subsequent Appropriate Assessment where necessary, that:  1. The plan or project will have significant adverse effects on the integrity of any European site (that does not host a priority natural habitat type/and or a priority species) but there are no alternative solutions and the plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of Natura 2000: or 3.  The plan or project will have a significant adverse effect on the integrity of any European site (that hosts a natural habitat type and/or a priority species) but there are no alternative solutions and the plan or project must nevertheless be carried out for imperative reasons for overriding public interest, restricted to reasons of human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion fro

Topic	Potentially Significant Adverse Effect, if Unmitigated	Draft Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
		Fisheries Guidance document, Planning for Watercourses in the Urban Environment.  BGIO-07 Provide attractive and safe routes linking parks, open spaces and other related features such as cultural sites and heritage assets as an integral part of Green Infrastructure provision, where appropriate and feasible, including taking into account the findings of Appropriate Assessment.  BGIO-09 Provide opportunities for Edenderry residents to engage in food production through allotments, community gardens and the provision of food foraging areas in new parks and Green Infrastructure proposals where appropriate.  BGIO-10 Support the provision of pocket parks, community gardens and allotments as outlined in Figure 6.13.  BGIO-11 Continue to promote and support rewilding and pollinator initiatives within the Plan Area in support of the National Pollinator Plan and ensure that the management of the Council's open spaces and parks is pollinator-friendly, provides more opportunities for biodiversity, and is carried out without the use of pesticides where possible.  BGIO-12 Develop linked corridors of small urban 'Miyawaki' native mini woodlands, a minimum of 100 m² in size, to capture carbon and encourage biodiversity in suitable existing built-up areas, in low grade public open space areas and other areas of zoned lands where deemed suitable and appropriate.  BGIO-13 Encourage the provision of Biodiversity Zones/Pollination Zones in the locations outlined in Figure 6.13.  BGIO-14 Continue the control programs of invasive species with all relevant stakeholders and landowners to control the key invasive species.  CAP-07 Require, where the presence of invasive species is identified at the site of proposed development in Edenderry, to detail how it is proposed to be managed and	Mongan Bog: Moyclare Bog: Raheenmore Bog: and Sharavogue Bog. It is Council policy to support collaboration between Offaly County Council, Regional Transition Team and relevant stakeholders of a partnership approach to integrated peatland management for a just transition that incorporates the management, rehabilitation and restoration / re-wetting of significant tracts of peatlands in conjunction with appropriate developed after uses. Peatlands It is an objective of the Council to require the preparation and submission of a Hydrological Report/Assessment for significant developments within and in close proximity to protected raised bogs and to take account of same in the assessment of impacts on the integrity of peatland ecosystems. It is an objective of the Council to work with relevant stakeholders on sultable peatland sites in order to demonstrate best practice in sustainable peatland conservation, management and restoration techniques to promote their heritage and educational value subject to ecological impact assessment and appropriate assessment screening.  Various Policies and Objectives relating to Waterways, Lakes and Wetlands (BLP-19 to 23 and BLO-12 and 13)  It is Council policy to protect the landscape associated with the River Shannon, including the Callows and views of special interest, and also to encourage the development of Shannonbridge, Banagher and Shannon Harbour as focal points. It will also be Council policy to investigate the possibility of providing a Linear Park based on the River Shannon from Banagher to Meelick, which takes account of the sensitive ecological nature of the Callows area.  It is Council policy to promote clear span bridging structures as the preferred option for culverts Any development proposal requiring culverting should also document stream habitat lost and provide compensatory habitat where possible. Realignment of water courses should incorporate stream enhancement measures, as outlined in Office of Public Works Environmental Guidance. The Council will consult wit
		controlled.  CAP-06 Maintain existing green infrastructure in	It is Council policy to support the protection and management of existing networks of woodlands, trees and hedgerows which are of amenity or biodiversity value and/or contribute to landscape character, and to strengthen local networks.

Topic	Potentially Significant Adverse Effect, if Unmitigated	Draft Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
		Edenderry and encourage and facilitate, in consultation with relevant stakeholders, the development of green infrastructure that recognises the synergies that can be achieved with regard to the following:  • Provision of open space amenities;  • Sustainable management of water;  • Protection and management of biodiversity;  • Protection of cultural heritage; and  • Protection of protected landscape sensitivities.	It is Council policy to encourage the planting of native species in all new residential developments (individual and multiple units) and as part of landscaping for commercial and industrial developments.  It is Council policy to require, where practical, the management of mature trees, such as tree surgery instead of felling particularly where the trees contribute to amenity.  It is an objective of the Council to preserve individual trees and groups of trees that are included in Table 4.13 and 4.14. It is an objective of the Council to consider the making of Tree Preservation Orders to protect trees and woodlands of high value.  It is an objective of the Council to encourage the preservation and enhancement of native and semi-natural woodlands, groups of trees and individual trees, not listed in Table 4.13 and 4.14;  (a) In particular, on the grounds of Country Houses, Gardens and Demesnes and on approaches to settlements in the country; and  (b) as part of the development management process, require the planting of native, deciduous, pollinator friendly trees in all new developments where possible.  It is an objective of the Council to encourage pursuant to Article 10 of the Habitats Directive, the management of features of the landscape, such as traditional field boundaries, important for the ecological coherence of the Natura 2000 network and essential for the migration, dispersal and genetic exchange of wild species.  It is an objective of the Council to encourage the retention, wherever possible, of hedgerows and other distinctive boundary treatment in the county. Where removal of a hedgerow, shone wall or other distinctive boundary treatment is unavoidable, provision of the same type of boundary will be required of similar length and set back within the site in advance of the commencement of construction works on the site (unless otherwise agreed by the Planning Authority).  BLO-19 (Green Infrastructure Strategy)  It is an objective of the Council to require all new developments to identified.  It is an o

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			Provisions relating to tourism TRP-04 It is Council policy to encourage tourism related developments inside existing settlements where the scale and size of the proposed development is appropriate and in keeping with the character of the settlement. TRP-05 It is Council policy that tourism related developments outside of settlements will be considered where there is proven sustainable need. The need to locate in a particular area must be balanced against the environmental impact of the development and the benefits to the local community and adhere to Section 13.9.8 of Chapter 13 Development Management Standards which address tourism and recreation TRP-08 It is Council policy to protect natural resources on which tourism is based through the enforcement of policies and relevant legislation in relation to protection of resources, architectural conservation areas, peatlands, water quality, species and populations of conservation concern and biodiversity. TRP-09 It is Council policy to seek to manage any increases in visitor numbers in order to avoid significant effects including loss of habitat and disturbance and impacts on existing infrastructure. Visitor / habitat management plans will be required for proposed tourism projects as relevant and appropriate. TRP-18 It is Council policy to support in conjunction with relevant landowners and recreational / tourism agencies, the maintenance of and enhanced access to the countryside, waterways, monuments, historic properties, for recreational and tourism purposes. Access should be planned and managed in a manner that protects environmental sensitivities, ecological corridors and the ability of local infrastructure to support increased tourism. Where significant effects cannot be ruled out to biodiversity, such as those within riparian zones, floodplains and peatlands, the subject development
Population	Potential	Also see measures under other environmental	shall be subject to Ecological Impact Assessment.  Also see measures under other environmental components including Soil, Water and Air and Climatic Factors.
and human	adverse effects	components including Soil, Water and Air and Climatic Factors.	ENVP-24 (Human Health)  It is Council policy to assess, as relevant, proposals for development in terms of, inter alia, potential impact on existing
	flood events.  Potential interactions if effects arising from environmental vectors.	EDP-08 Support and promote the development of economic and enterprise development and activity in a manner which contributes to the transition to a low carbon, climate resilient and environmentally sustainable county.  EDP-09 Support the development and expansion of enterprise and employment within	adjacent developments, existing land uses and/or the surrounding landscape. Where proposed developments would be likely to have a significant adverse effect on the amenities of the area through pollution by noise, fumes, odours, dust, grit or vibration, or cause pollution of air, water and/or soil, mitigation measures shall be introduced in order to eliminate adverse environmental impacts or reduce them to an acceptable operating level. Application of this policy will take into account instances whereby activities are licensed by other bodies through other processes (such as Integrated Pollution Control Licensing or Industrial Emissions Licensing).  ENVP-16 (Major Accidents Directive – Seveso III)
	vectors.	Edenderry, and to co-operate with all stakeholders, land owners and relevant agencies to attract investment.  EDP-10 Promote Edenderry as a competitive and attractive location for economic development emphasising Foreign Direct	It is Council policy, for the purposes of preventing / reducing the risk or limiting the consequences of a major accident involving dangerous substances, to have regard to the provisions of the Major Accidents Directive, and any regulations under any enactment giving effect to that Directive, and the recommendations of the Health and Safety Authority, in the control of:  The siting of new establishments;
		Investment.  EDP-10 Support IDA Ireland in the attraction of high value added manufacturing sectors and internationally traded sectors to Edenderry.  TCP-04 Encourage and facilitate the reuse and	The modification of existing establishments; and Development within the consultation distance of such establishments.  ENVP-15 (Radon) It is Council policy to ensure the implementation of the specific guidance on radon prevention measures for new homes as contained within the existing Building Regulations (including any updated/superseding regulations that may be published within the lifetime of this Plan).
		regeneration of derelict, vacant, backland and underutilised lands and buildings in the town centre for retail, residential and other mixed uses through legislative measures and / or by supporting the progression and delivery of projects funded by the Rural Regeneration and	CAEP-38 (Wind Farms) It is Council policy that in assessing planning applications for wind farms, the Council shall: (a) have regard to the provisions of the Wind Energy Development Guidelines 2006, the Interim Guidelines for Planning Authorities on Statutory Plans, Renewable Energy and Climate Change 2017 and the Draft revised Wind Energy Guidelines 2019 which are expected to be finalised in the near future; (b) have regard to 'Areas Open for Consideration for Wind Energy Developments' in the Wind Energy Strategy

Topic	Potentially Significant Adverse Effect, if Unmitigated	Draft Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
Soil	a Detection	Development Fund and other appropriate funds.  TCP-06 Ensure that growth planned for Edenderry town over the life of the Plan occurs in a sustainable and sequential manner, characterised by a compact, consolidated and permeable pattern of development linked by sustainable modes of transport including a robust network of pedestrian and cycle routes.  TCP-12 Support the development of sustainable low-carbon climate resilient communities and encourage a climate adaptation and mitigation approach to developments, which will enable regeneration.  TCP-13 Incorporate Sustainable Urban Drainage Systems (SuDS) and other nature-based solutions in accordance with the 'Nature-based Solutions to the Management of Rainwater and Surface Water Runoff in Urban Areas – Best Practice Interim Guidance Document, 2022' and any subsequent editions.  RP-03 Encourage the appropriate redevelopment of brownfield and infill sites for residential and mixed uses within the existing built-up footprint of Edenderry Town.  RP-08 That Edenderry, a Self-Sustaining Town, grows at a sustainable level in line with the Core Strategy Table and deliver consolidation and targeted 'catch up' investment in services, infrastructure, amenities and local employment in order to become more self-sustaining.  RO-01 In line with the requirements of the National Planning Framework, ensure that at least 30% of all new housing development is delivered within the existing built-up footprint of Edenderry Town.  CP-05 Support community-led and cultural projects, which enhance the social and economic well-being of residents of the town and improve the quality of the environment of the town.	Designations Map from the County Wind Energy Strategy; (c) the impact of the proposed wind farm development on proposed Wilderness Corridors as detailed in Objective BLO-28 of Chapter 4; (d) have regard to Development Management Standard 109 on wind farms contained in Chapter 13 of this Plan; and (e) have regard to existing and future international, European, national and regional policy, directives and legislation.
Soil	<ul> <li>Potential adverse effects on the hydrogeological and ecological function of the soil resource,</li> </ul>	Also see measures under other environmental components including Water and Material Assets.	Also see measures under other environmental components including Water.  Chapter 11.5.3 Waste Management  Offaly County Council require that all undeveloped, contaminated sites be remediated to internationally accepted standards prior to redevelopment (i.e. brownfield development). Treatment/management of any contaminated material shall comply as appropriate with the Waste Management Act 1996 (as amended) (waste licence, waste facility permit), and the Environmental Protection Act 1992 (as amended) (Industrial Emissions licensing, in particular the First Schedule, Class 11 Waste). These measures will ensure that contaminated material will be managed in a manner that removes

Topic	Potentially Significant Adverse Effect, if Unmitigated	Draft Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
	including as a		any risk to human health and ensures that the end use will be compatible with any risk.
	result of development on contaminated lands.  Potential for riverbank erosion.		Various Policies and Objectives relating to Geology, Eskers and Quarries (BLP-09 to 13 and BLO-07 to 09)  It is Council policy to protect from inappropriate development and maintain the character, integrity and conservation value of features or areas of geological interest as contained in the scheduled list of geological heritage sites identified in Table 4.11 Offaly Geological Sites.  It is Council policy to encourage, where practical and when not in conflict with ownership rights, access to geological features in the county.  It is Council policy to protect and conserve the landscape, natural heritage and biodiversity value of esker systems in the county as identified in the Offaly Esker Study, 2006.  It is Council policy to assess the impact of proposals for quarry development on nearby eskers, with reference to their status or relative importance, for example, amenity, landscape and scientific value in the context of the overall esker system.  It is Council policy to recognise the natural heritage value of disused quarries as rich habitats and to encourage landowners to preserve quarries post extraction as habitats rather than levelling or infilling the quarry area where possible subject to health and safety considerations and the protection of the relevant conservation objectives, qualifying interests and integrity of Natura 2000 sites.  It is an objective of the Council to protect county geological sites and mushroom stones identified in Table 4.11 Schedule of County Geological Sites identified by the Irish Geological Heritage Programme for Protection in County Offaly.  It is an objective of the Council to increase pedestrian and cycling access to esker and geological sites in turn increasing appreciation of esker and geological heritage, where possible, subject to Article 6 of the Habitats Directive.  It is an objective of the Council to consider, in consultation with the National Parks and Wildlife Service, Westmeath County Council, the Geological Survey of Ireland and others, the potential designation
			landscape as a UNESCO Geopark, to promote the unique geological heritage of the area.
Water	Potential adverse effects upon the status of water bodies and entries to the WFD Register of Protected Areas (ecological and human value), arising from changes in quality, flow and/or morphology.  Increase in flood risk and associated effects associated with flood events.	Also see measures under other environmental components including Soil and Material Assets CAP-08 Incorporate Sustainable Urban Drainage Systems and other nature-based surface water drainage solutions as part of all proposed developments.  CIP-07 Maintain and enhance the existing surface water drainage systems in Edenderry and to protect surface and ground water quality in accordance with the Water Framework Directive.  CIP-08 Require that all development proposals demonstrate that appropriate Sustainable Urban Drainage Systems (SuDS) and other nature-based solutions are examined and provided.  CIP-09 Manage flood risk in Edenderry in conjunction with the Office of Public Works and in accordance with the requirements of the Planning System and Flood Risk Management Guidelines for Planning Authorities (2009) and circular PL02/2014 (August 2014).	Also see measures under other environmental components including Soil and Material Assets  Various Policies and Objectives relating to Water Quality/Status (ENVP-01 to 08, ENVO-01 to 04, CAEP-30 and REDP-05)  It is Council policy to ensure that the Water Framework Directive, the River Basin Management Plan and any subsequent Water Management Plans are fully considered throughout the planning process.  It is Council policy to manage, protect and enhance surface water and ground water quality to meet the requirements of the Water Framework Directive.  It is Council policy to support the implementation of the Water Framework Directive, the River Basin Management Plan and the Local Authority Waters Programme in achieving and maintaining at least good environmental status for all water bodies in the county. Development proposals shall not have an unacceptable impact on the water environment, including surface waters, groundwater quality and quantity, river corridors and associated woodlands.  It is Council policy that in assessing applications for developments, that consideration is had to the impact on the quality of surface waters having regard to targets and measures set out in the River Basin Management Plan, and any subsequent local or regional plans.  It is Council policy that all proposed development which may have an impact on a high status water quality site will require site specific assessment to determine localised pressures and demonstrate suitable mitigation measures in order to protect these sites.  It is Council policy to promote and comply with the environmental standards and objectives established for:  (i) Bodies of surface water, by the European Communities (Surface Waters) Regulations 2009, made to give effect to the measures needed to achieve the environmental objectives established for groundwater by the European Water

Topic	Potentially Significant Adverse Effect, if Unmitigated	Draft Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
		Chapter 11 Land Use Zoning Objectives: Designations Constrained Land Uses Flood risk areas are represented by a 'Constrained Land Use' designation. This designation generally limits new development, but will facilitate existing development uses within these areas that may require small scale development proposals within these areas shall be accompanied by a site specific flood risk assessment, carried out in accordance with The Planning System and Flood Risk Assessment Guidelines and Circular PL 2/2014 (or as updated), which shall assess the risks of flooding associated with the proposed development. Proposals shall only be considered favourably where it is demonstrated to the satisfaction of the Planning Authority that they would not have adverse impacts or impede access to a watercourse, floodplain or flood protection and management facilities, or increase the risk of flooding to other locations and be in accordance with the proper planning and sustainable development of the area. The nature and design of structural and non-structural flood risk management measures required for development in such areas will also be required to be demonstrated, to ensure that flood hazard and risk will not be increased. Measures proposed shall follow best practice in the management of health and safety for users and residents of the development.  Land Use Zoning Objective – Constrained Land Uses  LUZO-13 Facilitate the appropriate management and sustainable use of flood risk areas designated as 'Constrained Land Uses' in the zoning map in accordance with the provisions of the Planning System and Flood Risk Management Guidelines for Planning Authorities (2009), as amended, in consultation with the OPW.	Framework and Groundwater Directives, for which standards and objectives are included in the River Basin Management Plan.  It is Council policy to protect groundwater sources through the implementation of the Groundwater Protection Scheme and Source Protection Zones. Development proposals within these zones which have the potential to pose a risk to groundwater will be required to demonstrate that no reasonable alternative site is available and that groundwater quality will be protected to the satisfaction of the Council.  It is Council policy to encourage the use of catchment-sensitive farming practices, in order to meet Water Framework Directive targets and comply with the River Basin Management Plan.  It is an objective of the Council to ensure, through the implementation of the River Basin Management Plan, and any other associated legislation, the protection and improvement of all drinking water, surface water and ground waters throughout the county.  It is an objective of the Council to protect through its regulatory controls and in conjunction with the Local Authority Waters Programme, water bodies with 'high ecological status'; to restore water bodies that have fallen below 'high ecological status': to maintain water bodies at 'Good Status'; and to mitigate threats to water bodies identified as 'At Risk' i.e. 'Moderate and Poor Status'.  It is an objective of the Council to protect both ground and surface water resources; to work with Irish Water to develop and implement Drinking Water Safety Plans to protect sources of public water supply and their contributing catchment; and to work with the National Federation of Group Water Schemes in respect of Source Protection Plans for Group Water Schemes to protect these sources.  It is an objective of the Council to comply with the Blue Dot Catchments Programme.  It is Council policy to ensure that agricultural developments are designed and constructed in a manner that will ensure that agricultural developments are designed and constructed in a manner that will
			planning authority in determining planning applications.

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			It is Council policy to require a site-specific Flood Risk Assessment (FRA) for all planning applications in areas at risk of flooding (fluvial, pluvial or groundwater), even for developments deemed appropriate in principle to the particular Flood Zone. The detail of these site-specific FRAs will depend on the level of risk and scale of development. A detailed site-specific FRAs should quantify the risks, the effects of selected mitigation and the management of any residual risks. The assessments shall consider and provide information on the implications of climate change with regard of flood risk in relevant locations. The 2009 OPW Draft Guidance on Assessment of Potential Future Scenarios for Flood Risk in relevant locations. The 2009 OPW Draft Guidance on Assessment of Potential Future Scenarios for Flood Risk in relevant locations. The 2009 OPW Draft Guidance on Assessment of Potential Future Scenarios for Flood Risk in relevant locations. The 2009 OPW Draft Guidance on Assessment of Potential Future Scenarios for Flood Risk in relevant locations. The 2009 OPW Draft Guidance on Assessment of Potential Future Scenarios for Flood Risk in relevant locations. The 2009 OPW Draft Guidance on Assessment of Potential Future Scenarios for Flood Risk Management land in the Stenarios of the CFRAMS Theorems and Stenarios of the Guidance of Structural and non-structural risk management measures to include, but not be limited to specifications of the following-floor levels, internal layout, flood resilient construction, flood resistant construction, emergency response planning, access and egress during flood events.  It is Council policy to work with other bodies and organisations, as appropriate, to help protect critical infrastructure, including water and wastewater, within the county. From risk of flooding, Amy potential future variations to the Plan shall consider, as appropriate any new and/or emerging data, including, when available, any relevant information contained in the CFRAMS Flood Risk Management of the Coun

Topic	Potentially Significant Adverse Effect, if Unmitigated	Draft Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
			they would not have adverse impacts or impede access to a watercourse, floodplain or flood protection and management facilities, or increase the risk of flooding to other locations and be in accordance with the proper planning and sustainable development of the area. The nature and design of structural and non-structural flood risk management measures required for development in such areas will also be required to be demonstrated, to ensure that flood hazard and risk will not be increased. Measures proposed shall follow best practice in the management of health and safety for users and residents of the development.  LUZO-14 Facilitate the appropriate management and sustainable use of flood risk areas designated as 'Constrained Land Use' on Settlement Plan zoning maps.  13.8.3 Flood Risk Assessment  The Council will have regard to the Planning System and Flood Risk Management Guidelines for Local Authorities (DEHLG and OPW 2009) when assessing planning applications. The key requirements for the management of development in areas at risk of flooding include:  • All development proposals within or incorporating areas at moderate to high risk of flooding will require site specific and appropriately detailed Flood Risk Assessments.  • All development proposals within or incorporating areas at moderate or high risk of flooding will require the application of the Development Management Justification Test in accordance with the Planning System and Flood Risk Management-Guidelines for Planning Authorities (DEHLG and OPW, 2009).  • Any proposal that is considered acceptable in principle shall demonstrate the use of the sequential approach to inform the site layout and design of development. Proposals shall also demonstrate that mitigation and management measures can be put in place and that the development will not increase flood risk elsewhere.  DMO-106 Flood Risk Assessments
Air and Climatic Factors	Potential conflict between development under the Plan and aiming to reduce carbon emissions in line with local, national and European environmental objectives.      Potential conflicts between transport emissions, including those from cars, and air quality.      Potential conflicts between increased frequency of	Strategic Aim 7: Climate Action Enhance climate adaptation and mitigation, and accelerate a transition to a low carbon, climate resilient and environmentally sustainable economy in Edenderry.  EDP-24 Promote transformative projects with the support of Government funding streams for low-carbon focused projects.  CAP-01 Support the transition of Edenderry to a competitive, low carbon, climate resilient and environmentally sustainable town by 2050, by way of reducing greenhouse gases, increasing renewable energy, and improving energy efficiency.  CAP-02 Promote and encourage positive community and/or co-operative led climate action initiatives and projects in Edenderry that seek to reduce carbon emissions, improve energy efficiency, enhance green infrastructure and encourage awareness on climate change issues.  CAP-03 Encourage innovation and facilitate the development of pilot schemes in Edenderry that support climate change mitigation and adaptation measures.	Also refer to the overall approach to land use zoning and sustainability provided by the Plan. Various other Plan provisions including those under headings such as Peatlands, Compact Growth, Sustainable Mobility and Integrated Transport and Landuse Planning, Reasonable Alternatives & Existing Infrastructural Assets, Renewable Energy and Low Carbon District Heating.  Various Policies and Objectives relating to Air Quality (ENVP-17 to 19 and ENVO-09 to 12)  It is Council policy to manage air quality in accordance with relevant legislation and policy.  It is Council policy to promote the preservation of best ambient air quality compatible with sustainable development in accordance with the EU ambient Air Quality and Cleaner Air for Europe (CAFE) Directive (2008/50/EC) and ensure that all air emissions associated with new developments are within Environmental Quality Standards as set out in the Air Quality Standards Regulations 2011, or any updated/superseding documents.  It is Council policy to require activities likely to give rise to air emissions to implement measures to control such emissions and to undertake air quality monitoring. Application of this policy will take into account instances whereby activities are licensed by other bodies through other processes (such as Integrated Pollution Control Licensing or Industrial Emissions Licensing).  It is an objective of the Council to reduce harmful emissions and achieve and maintain good air quality for the county. It is an objective of the Council to actively promote measures to reduce air pollution and combat climate change including promotion of energy efficient buildings, cleaner home heating, green infrastructure, active and public transport modes, electric vehicles and innovative design solutions.  It is an objective of the Council to promote sustainable design and construction to help reduce emissions from the demolition and construction of buildings.  It is an objective of the Council to work with relevant agencies to support local data collection in the

Topic	Potentially Significant Adverse Effect, if Unmitigated	Draft Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
	noise emissions and protection of sensitive receptors.  • Potential conflicts with climate adaptation measures including those relating to flood risk management.	CAP-04 Support the implementation of the Offaly County Climate Change Adaptation Strategy and promote Edenderry as a key driver of the transition to a low carbon economy within the east of the county.  CAP-05 Support the effective and efficient use of land in Edenderry, prioritising compact growth through the development of brownfield/infill land in the built-up footprint of the town in preference to greenfield land.  CAP-15 Support the roll out of the National Cycle Network and the connection of local cycling routes in the town to the external National Cycle Network.  CAP-16 Support the implementation and provision of the decarbonisation projects listed in Table 8.1 in Edenderry during the lifetime of this Plan.  CAO-01 Consider a variation of the development plan within a reasonable period of time, or to include such other mechanism, as may be appropriate, to ensure that the development plan will be consistent with the approach to climate action recommended in the revised Local Area Plan Guidelines when adopted or any other relevant guidelines.  CAO-02 Source E.U. and national funding for projects that support Climate Change Adaptation and Mitigation.  CAO-03 Provide LED lighting in all new lighting and retrofit of existing lighting throughout the town.	It is Council policy to promote the pro-active management of noise where it is likely to have significant adverse impacts on health and quality of life. Planning permission will not normally be granted for new uses / development or extensions of existing uses that produce significant and unacceptable levels of noise and/or vibration at site boundaries or within adjacent noise sensitive acreas, especially residential areas.  It is Council policy that noise sensitive development proposals located within proximity to a noise source, such as an existing or proposed national road, should include noise attenuation measures.  Various Policies and Objectives relating to Climate Change Adaptation and Mitigation (CAEP-07 to 15 and CAEO-01 and CAEO-01 and CAEO-03).  It is Council policy to support and facilitate European and national objectives for climate adaptation and mitigation as detailed in the following documents, taking into account other provisions of the Plan (including those relating to land use planning, energy, sustainable mobility, flood risk management and drainage):  Climate Action Plan (2019 and any subsequent versions);  National Climate Change Adaptation Framework (2018 and any subsequent versions);  Relevant provisions of any Sectoral Adaptation Plans prepared to comply with the requirements of the Climate Action and Low Carbon Development Act 2015, including those seeking to contribute towards the National Transition Objective, to pursue, and achieve, the transition to a low carbon, climate resilient and environmentally sustainable economy by the end of the year 2050; and  Offaty Climate Change Adaptation Strategy.  It is Council policy to support the implementation and provision of the decarbonisation projects listed in Table 3.2 of the County Development Plan.  It is Council policy to support the implementation and provision of the decarbonisation projects listed in Table 3.2 of the County Development Plan.  It is Council policy to support the inasting the provision of the development of renewable e

Topic Potentially Significant Adverse E if Unmitigat	Draft Local Area Plan measures, including fect,	Existing Offaly County Development Plan 2021-2027 measures, including
		Policies relating to Compact Growth, Sustainable Mobility and Integrated Transport and Landuse Planning (CAEP-21 and 22) It is Council policy to proactively encourage decarbonisation of local journeys by focusing on compact growth and reduced sprawl by targeting infill and brownfield lands in the existing built-up footprint of settlements.  It is Council policy to improve walking and cycling connectivity within settlements and in particular with schools, town centres and employment areas, and to work with the National Trails Office, Coillite, the Department of Planning, Housing and Local Government, the Department of Transport, Tourism and Sport, and other relevant stakeholders, to improve on the existing level of infrastructure facilities for walking and cycling in this regard.  Policies relating to Green Infrastructure (CAEP-64) It is Council policy to maintain existing green infrastructure and encourage and facilitate, in consultation with relevant stakeholders, the development of green infrastructure that recognises the synergies that can be achieved with regard to the following:  Provision of open space amenities:  Sustainable management of water;  Protection of cultural heritage; and  Protection of cultural heritage; and  Protection of protected landscape sensitivities.  Policies relating to Economic Development: Climate Action (REDP-15 to 18)  REDP-16 It is Council policy to support the agricultural sector to employ green technologies in the provision of its goods and services, while taking measures to accelerate the transition towards a sustainable, low carbon and circular economy.  REDP-16 It is Council policy to encourage the development of environmentally sustainable practices with a low carbon footprint, particularly agriculture, to ensure that development of environmentally sustainable practices with a low carbon footprint, particularly agriculture, to ensure that development of environmentally sustainable practices with a low carbon footprint, particularly agriculture, to ensure that development o

 $<sup>^{\</sup>rm 53}$  As per Traffic and Transport Assessment Guidelines, National Roads Authority, 2014 CAAS for Offaly County Council

Topic	Potentially Significant Adverse Effect, if Unmitigated	Draft Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
Material Assets	Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity ensures the mitigation of potential conflicts).     Failure to adequately treat surface water run-off that is discharged to	Also see measures under CEMP requirement, other environmental components including Population and Human Health and various Land Use and Phasing provisions from the Plan.  Strategic Aim 8: Critical Infrastructure Promote facilitate the timely provision of infrastructure and utilities that will support sustainable socioeconomic growth and protect the quality of the environment of the town in a low carbon manner.  Strategic Aim 9: Planning and Infrastructural Assessment To phase new development to ensure that it occurs in a sequential and efficient manner and in tandem with the delivery of supporting physical and social infrastructure.  CAP-09 Encourage development proposals that are low carbon, well adapted to the impacts of	Also see measures under CEMP requirement, other environmental components including Population and Human Health and various Land Use and Phasing provisions from the Plan.  Various Policies and Objectives relating to Water Services and Surface Water (WSP-01 to 25 and WSO-02 to 09)  WSP-01 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.  WSP-02 It is Council policy to liaise and co-operate with Irish Water in the implementation and delivery of the 'Water Services Strategic Plan' (2015, under review in 2020), the 'Irish Water Business Plan 2015-2021', the 'Irish Water National Water Resources Plan' (expected in 2021) and the 'Irish Water Investment Plan 2020-2024' (or any amendment thereof) and other relevant investment works programmes of Irish Water, to provide infrastructure to service settlements in accordance with the Council's Core Strategy and Settlement Strategy.  WSP-03 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.  WSP-04 It is Council policy to require developments to connect to public wastewater infrastructure and public water supplies, where available, including group water schemes, unless otherwise approved by the Planning Authority.
	water bodies (water services infrastructure and capacity ensures the mitigation of potential conflicts). • Failure to comply with drinking water regulations and serve new development with adequate drinking water	climate change, include mitigation measures, and maximise energy efficiency through renewable energy sources, water conservation, SuDs, siting, layout and design.  CAP-10 Promote the use of district heating systems as a decarbonising technology for the built environment powered by renewable fuel sources and / or waste heat in new residential and commercial developments where such development does not have a negative impact on the surrounding environment, landscape, biodiversity or local amenities.  CAP-11 Promote the use of efficient energy storage systems and infrastructure that support energy efficiency and reusable energy system optimisation, subject to compliance with proper	WSP-05 It is Council policy as the Regulatory Authority to promote the protection of private water sources, the development of community connections (water and wastewater), and improvement works to septic tanks in accordance with national policy and regulations, and to administer the multi-annual Rural Water Programme (2019-2021). WSP-06 It is Council policy to ensure that development is permitted in tandem with available water supply and wastewater treatment and to manage development, so that new schemes are permitted only where adequate capacity or resources exists or will become available within the life of a planning permission. Prior to applying for planning permission, applicants shall consult with Irish Water regarding feasibility and capacity for water services connection. Applicants shall submit proof of documentation that connection to a group water scheme has been granted, where applicable.  WSP-07 It is Council policy to ensure the delivery and phasing of services in the county is subject to the required appraisal, planning and environmental assessment processes and shall avoid adverse impacts on the integrity of the Natura 2000 network.  WSP-08 It is Council policy to ensure any proposal for geothermal or other energy subsurface exploration is accompanied by an assessment that addresses the potential impacts on groundwater quality.  Water Supply  WSP-09 It is Council policy to collaborate with and support, as relevant and appropriate, Irish Water in its role as the
	(water services infrastructure and capacity ensures the mitigation of potential conflicts).  Increases in waste levels.  Potential impacts upon public assets	planning and environmental considerations.  CAP-12 Support the incorporation of blue roofs, green roofs, green walls, photovoltaic and/or solar thermal collector panels and heat pumps on new residential, commercial, industrial and public buildings.  CAP-14 Support the use of smart city technologies in Edenderry to assist in energy reduction through integrating public lighting infrastructure with EV charging points and also providing real time data on street lighting energy usage, atmospheric pressure, CO2 emissions and	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.  WSP-10 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.  WSP-11 It is Council policy to promote the conservation and sustainable use of water in existing and new development within the county and to encourage demand management measures among all water users including rain water harvesting and grey water recycling.

Significant Adverse Effect, if Unmitigated	
and infrastructure.  Interactions between agricultural waste and soll, between agricultural activities (e.g. parameter). The proposed of the strain of the str	ne corridor from oplications within on settlements in and in increasing 2021, to 99% by a Water and to structure to re Strategy and systems with a Treatment read to ensure and the unserviced attent plants aritional solutional sitted.  The the use of the ments. The lid site before any arinage system walls, planting alimate change gnificant size as per the ursor to large-

Topic	Potentially Significant Adverse Effect, if Unmitigated	Draft Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
		Roads Guidelines 2012 or any subsequent	minimising the demand for capital investment.
		edition.	WSO-03 It is an objective of the Council to co-operate with Irish Water in the delivery of the Eastern and Midlands Water
		CIP-05 Ensure that new cycling and walking	Supply Project and to ensure the maximum benefit from this project to County Offaly, in particular with respect to
		infrastructure, including the provision of new	economic development potential and security of supply.
		cycling hubs / parks, shall be provided subject to	WSO-04 It is an objective of the Council to engage with Irish Water to examine significant raw water sources which may
		environmental constraints, including those	be made redundant by the Water Supply Project for the Eastern and Midlands Region with a view to reserving and
		related to habitats and potential impacts such as	protecting them for future back up or 'windfall' type economic development opportunities where high water use is
		disturbance from lighting; this will include minimising river crossings, avoiding sensitive	required. WSO-05 It is an objective of the Council to provide guidance and advice regarding the protection of water supply to
		habitats, not increasing barriers to flood waters	private wells with the overall responsibility for protection remaining with the householder.
		and sustainable design and construction	Waste Water
		techniques.	WSO-06 It is an objective of the Council to support appropriate options for the extraction of energy and other resources
		CIP-06 Ensure that adequate and appropriate	from sewage sludge subject to appropriate environmental assessment and the planning process.
		water services infrastructure is provided in	WSO-07 It is an objective of the Council to support the servicing of small towns and villages through the serviced sites
		accordance with the requirements of Irish Water	initiative to provide an alternative to one-off housing in the countryside, in accordance with National Policy Outcome 18b
		and as part of new development proposals.	of the National Planning Framework and Regional Policy Objective 4.78 of the Eastern and Midland Regional Spatial and
		CIP-10 Promote and facilitate the development	Economic Strategy.
		and renewal of energy and communications	Surface Water WSO 09 It is an objective of the Council to improve surface water infractructure and sustainable drainage and to reduce
		networks in Edenderry, while protecting the amenities of the town.	WSO-08 It is an objective of the Council to improve surface water infrastructure and sustainable drainage and to reduce the risk of flooding, to facilitate the growth of settlements as per the county's settlement hierarchy.
		CIP-11 Seek the undergrounding of all	WSO-09 It is an objective of the Council to utilise, where appropriate, the provisions of Section 48 and 49 of the
		electricity, telephone and television cables within	Planning and Development Act, 2000 (as amended) to generate financial contributions towards the capital costs of
		the town.	providing surface water infrastructure in the county.
		CIP-12 Adequately maintain recycling facilities	Various Policies and Objectives relating to Waste Management
		and to secure the provision of additional	ENVP-12 It is Council policy to continue to fulfil its duties under the Waste Management (certification of historic
		facilities, as required, including in conjunction with development.	unlicensed waste disposal and recovery activity) Regulations 2008, including those in relation to the identification and registration of closed landfills.
		CIO-01 Increase modal share for pedestrians,	ENVP-13 It is Council policy to require the provision of recycling infrastructure where it is considered necessary and will
		cyclists and public transport, and decrease	assess requirements for recycling facilities on a case by case basis as part of the development management process.
		dependency on private cars subject to the	ENVP-14 It is Council policy to require Construction and Environmental Management Plans (CEMPs) to be prepared for
		Council securing funding under the NTA Active	larger scale projects and this requirement shall be assessed on a case by case basis as part of the development
		Travel Investment Programme and other	management process. Where a CEMP is required, it shall be prepared in accordance with the criteria set out in Section
		applicable funding streams to develop and deliver schemes to help achieve this objective.	11.5.2 of this Plan. ENVO-05 It is an objective of the Council to implement the Eastern-Midlands Regional Waste Management Plan
		CIO-02 Make provision for cycle lanes in	2015-2021; the Council's Litter Management Plan and Waste Bye-Laws.
		accordance with the Edenderry Urban Cycle	Chapter 11.5.2 Waste Management (Construction and Environmental Management Plan)
		Network Map by NTA when published, subject to	Construction Environment Management Plans (CEMPs) shall be prepared for larger scale projects and this requirement
		resources and funding.	shall be assessed on a case by case basis as part of the development management process. Such plans shall incorporate
		CIO-03 Identify suitable areas in Edenderry	relevant mitigation measures contained in any accompanying Environmental Impact Assessment Report or Appropriate
		Town for age-friendly parking bays, in	Assessment and in this Development Plan. CEMPs shall typically provide details of intended construction practice for the
		accordance with the Age Friendly Strategy for	proposed development, including where applicable:
		Offaly 2018-2021, and any future editions.	<ul> <li>Location and details of site compounds, refuse storage areas, construction site offices and staff</li> </ul>
		CIO-04 Support the delivery of the	facilities, site security fencing and hoardings, on-site staff car parking;
		infrastructure proposed in the Local Transport	Details of construction traffic - timing and routing, directional signage, measures to obviate queuing,      alternative appropriate for medications and unbidge and recovered to provide a signature.
		Plan (LTP) subject to funding being made	alternative arrangements for pedestrians and vehicles, and measures to prevent the spillage or deposit of clay,
		available.	rubble or other debris;

Topic	Potentially Significant Adverse Effect, if Unmitigated	Draft Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including	
		CIO-05 To investigate the feasibility of constructing an Edenderry by-pass and relief roads, taking into account environmental sensitivities as identified in the SEA Environmental Report and the policies and objectives of the County Development Plan relating to sustainable mobility. Where feasibility is established, the Council will seek to pursue and / or facilitate the relevant project, subject to other provisions in the County Development Plan, including section 8.6.4 Corridor and Route Selection Process.  CIO-06 To reallocate corresponding roadspace within Edenderry to walking, cycling and public transport to accompany / occur concurrently with the provision of additional roadspace capacity under CIO-05. This may take the form of removing traffic from streets, removing lanes of traffic, narrowing carriageways, traffic management measures, or removing on-street parking to provide cycle tracks or widened footpaths.  CIO-07 Support and work in cooperation with Irish Water to upgrade Edenderry Wastewater Treatment Plan.	Details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels; Containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained; such bunds shall be roofed to exclude rainwater; Disposal of construction/demolition waste and details of how it is proposed to manage excavated soil, including compliance with 2006 Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects, Department of the Environment; A water and sediment management plan, providing for means to ensure that surface water runoff is controlled such that no silt or other pollutants enter local water courses or drains; Details of a water quality monitoring and sampling plan; If peat is encountered - a peat storage, handling and reinstatement management plan; Measures adopted during construction to prevent the spread of invasive species (such as Japanese Knotweed); Appointment of an ecological clerk of works at site investigation, preparation and construction phases; and Details of appropriate mitigation measures for lighting specifically designed to minimise impacts to biodiversity, including bats.  DMS-82 (Tourist Facilities) Tourist and recreation facilities, in particular accommodation, shall be generally located within towns and villages unless; A comprehensive justification of the need for the development by its nature and space requirements to be located outside towns and villages, for example, golf courses, swimming, angling, sailing/boating, pier/marina development, water sports, equestrian and pony trekking routes, adventure/interpretative centres and associated ancillary uses, tourist related leisure facilities including walking and cycling: Evidence that the proposed development will not have an adverse impact upon the scenic value, heritage value and the environmental, ecological or conservation quality of primary tourism asset(s) and its their general environment: Evidence t	
Cultural Heritage	Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities.	Strategic Aim 3: Built Heritage To protect, conserve and manage Edenderry's buildings, areas, structures, sites and features of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest, by promoting the understanding, enhancement and appropriate development of these assets in order to instigate regeneration of the town.  TCP-08 Further improve the streetscape and public realm in Edenderry town centre by	Various Policies and Objectives relating to Protected Structures (BHP-01 to 11 and BHO-01 and 02)  It is Council policy to ensure the protection, sympathetic and sensitive modification, alteration, extension or reuse of protected structures or parts of protected structures, and the immediate surrounds included and proposed for inclusion in the Record of Protected Structures that are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest, together with the integrity of their character and setting.  It is Council policy to ensure the protection of the curtilage of protected structures or proposed protected structures and to prohibit inappropriate development within the curtilage or attendant grounds of a protected structure which would adversely impact on the special character of the protected structure including cause loss of or damage to the special character of the protected structure and loss of or damage to, any structures of architectural heritage value within the curtilage of the protected structure.	

Topic Potentially Significant Adverse Effe if Unmitigated		Existing Offaly County Development Plan 2021-2027 measures, including
	undergrounding existing cables and improving pavements and street furniture in particular CAP-06 Maintain existing green infrastructure in Edenderry and encourage and facilitate, in consultation with relevant stakeholders, the development of green infrastructure that recognises the synergies that can be achieved with regard to the following:  • Provision of open space amenities; • Sustainable management of water; • Protection and management of biodiversity; • Protection of cultural heritage; and • Protection of protected landscape sensitivities.  BHP-01 Encourage the rehabilitation, renovation, climate-proofing and re-use of existing protected structures, where appropriate, over the demolition of same and new-build onsite.  BHP-02 Encourage the rehabilitation, renovation, climate-proofing and re-use of existing vernacular structures that are not listed on the Record of Protected Structures, over the demolition of same and new-build on-site.  BHP-03 Protect and enhance the urban form of Edenderry including the character of the streetscape of JKL Street, O'Connell Square, and vistas.  BHP-04 Protect all structures in Edenderry that are listed in the County Offaly Record of Protected Structures that are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest in Edenderry.  BHP-05 Ensure that all applications pertaining to the re-development of buildings that include features such as vernacular doorways and archways include a detailed methodology, prepared by a suitably qualified person, for the repair and maintenance of these features.  BHP-06 Encourage contemporary development within Edenderry where the applicant can successfully demonstrate that any proposal will not negatively detract from the special character of the existing built environment.  BHP-07 Ensure that full consideration is given to the protection of archaeological heritage	works to, protected structures. Method statements should make reference to the Department of Culture, Heritage and the Gaeltacht's Advice Series on how best to repair and maintain historic buildings.  It is Council policy to favourably consider the change of use of any structure included on the Record of Protected Structures provided such a change of use does not adversely impact on its intrinsic character and is in accordance with the proper planning and sustainable development of the area.  It is Council policy to actively encourage uses that are compatible with the character of protected structures. It is Council policy to retain where practicable a protected structure which has been damaged by fire, and to retain those elements of that structure that have survived (either in whole or in part) and that contribute to its special interest. It is Council policy to prohibit the demolition of any protected structure unless the Council is satisfied that exceptional circumstances exist. The demolition of a protected structure unterest the Council is satisfied that exceptional circumstances exist. The demolition of a protected structure with the retention of its façade will likewise not generally be permitted.  It is Council policy to require an Architectural Heritage Assessment Report, as described in Appendix B of the Architectural Heritage Protection, Guidelines for Planning Authorities, Department of Culture, Heritage and the Gaeltacht (2013), to accompany all applications involving a protected structure.  It is Council policy to advise owners of protected structures. Department of funding applications under Built Heritage Scheme of the Historic Structures Fund.  It is Council policy to ensure that in the event of a planning application being granted for development within the curtilage of a protected structure, the proposed works to the protected structure should occur, where appropriate, in the first phase of the development to traditional construction methods and materials and do not have a detrimental physic

Potentially Significant Adverse Effect, if Unmitigated	Draft Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
	when undertaking, approving or authorising development in order to avoid unnecessary conflict between development and the protection of archaeological heritage.  BHP-08 Have regard to the Zones of Archaeological Potential as shaded on Figure 4.2 to ensure that planning applications are referred to the appropriate prescribed bodies.  BHP-09 Protect the historical burial grounds within Edenderry town and encourage their maintenance in accordance with conservation principles.  BHO-01 Secure, where feasible and appropriate, the protection of the character of the existing original carriage archways/accessways to the rear of existing properties.  BHO-02 Secure, where feasible, the protection of the character of structures of interest, which are part of the town's milling and distilling heritage.	It is Council policy to seek the repair and retention of traditional timber and/or rendered shop fronts and pub fronts, including those that may not be protected structures.  It is Council policy to communicate and work with owners of thatch buildings regarding the availability of conservation grants and funding.  It is Council policy to encourage where appropriate the covering of thatch with metal, as a measure for the protection of buildings which are unoccupied and showing signs of considerable distress.  It is Council policy to support proposals to refurbish vernacular structures that are in a run down or derelict condition, provided that;  Appropriate traditional building materials and methods are used to carry out repairs to the historic fabric; and Proposals for extensions to vernacular structures that are in a run down or derelict condition, provided that:  Appropriate traditional building materials and methods are used to carry out repairs to the historic fabric; and Proposals for extensions to vernacular structures are reflective and proportionate to the existing building and do not erode the setting and design qualities of the original structure which make it attractive.  It is an objective of the Council to identify and retain good examples of vernacular architecture and historic street furniture in situ, for example, cast-iron post boxes, water pumps, signage, street lighting, kerbing and traditional road and street surface coverings.  Various Policies and Objectives relating to Industrial Heritage (BHP-22 to 27)  It is Council policy to protect the industrial heritage of Offaly, including mills, historic industrial buildings, canals and historic bridges.  It is Council policy to utilise the information provided within Mills of County Offaly: An Industrial Heritage Survey (2009) when assessing development proposals for surviving industrial heritage of the Grand Canal and ensure that development within its vicinity is sensitively designed and does not have a detrimental effect on the character of th

Topic	Potentially Significant Adverse Effect, if Unmitigated	Draft Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including	
			It is Council policy to support and promote the protection and appropriate management and sympathetic enhancement of the county's archaeological heritage within the Plan area, in particular by implementing the Planning and Development Act 2000 (as amended) and the National Monuments Act 1930 (as amended).  It is Council policy to seek to promote awareness of and access to archaeological sites in the county where appropriate. It is Council policy to consult with the National Monuments Service of the Department of Culture, Heritage and the Gaeltacht (DCHG) in relation to archaeological sites within and/or adjoining a proposed development. It is Council policy to facilitate the identification of important archaeological landscapes in the county. It is Council policy that any development that may, due to its size, location or nature, have implications for archaeological heritage (including both sites and areas of archaeological potential / significance) shall be subject to an archaeological heritage (including both sites and areas of archaeological potential / significance) shall be subject to an archaeological assessment. When dealing with proposals for development that would impact upon archaeological sites and/or features, there will be presumption in favour of the 'preservation in situ' of archaeological remains and settings, in accordance with Government policy. Where permission for such proposals is granted, the Planning Authority will require the developer to have the site works supervised by a licenced archaeologist.  It is Council policy to ensure that archaeological excavation is carried out according to best practice as outlined by the National Monuments Service, Department of Culture, Heritage and the Gaeltacht, the National Museum of Ireland and the Institute of Archaeologists of Ireland and to protect previously unknown archaeological sites and features, where they are discovered during development works.  It is Council policy to ensure the protection and preservation of underwater and terrestrial arc	
			Various Provisions relating to Monastic Sites (BHP-41 to 44 and BHO-06)  It is Council policy to retain the nominated status of the area comprising the National Monument at Clonmacnoise, enclosing eskers, Mongans Bog, Clonmacnoise callows, Fin Lough and the limestone pavement at Clorhane as the "Clonmacnoise Heritage Zone" in accordance with the recommendations of the study of the area carried out by the Environmental Sciences Unit of Trinity College, Dublin as shown in Figure 10.7 of this Plan.  It is Council policy to investigate the potential of Durrow Demesne as a public amenity and tourism asset.  It is Council policy to support and promote the protection and appropriate management of all monastic sites in the county.  Mass Rocks and Holy Wells  It is Council policy to preserve, protect and, where necessary, enhance mass rocks and holy wells in the County.  The Council acknowledges the nomination by the Government of Ireland, of two Monastic sites, Clonmacnoise in its own right and Durrow, as a suite of potential sites, on the tentative list for inclusion to the UNESCO World Heritage sites list. It is an objective of the Council to explore the potential of further designating the Monastic Sites at Clonmacnoise and Durrow as prospective UNESCO World Heritage Sites.	
Landscape	Occurrence of adverse visual impacts and conflicts with the appropriate	CAO-05 Seek to improve and promote looped walks along the River Boyne and Grand Canal in conjunction with all stakeholders recognising them as important health and recreation infrastructure within the town.	CAEP-38 (Wind Farms)  It is Council policy that in assessing planning applications for wind farms, the Council shall:  (a) have regard to the provisions of the Wind Energy Development Guidelines 2006, the Interim Guidelines for Planning Authorities on Statutory Plans, Renewable Energy and Climate Change 2017 and the Draft revised Wind Energy Guidelines 2019 which are expected to be finalised in the near future;	

Topic	Potentially	Draft Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
Topic	Significant Adverse Effect, if Unmitigated	Drait Essai Area i lair incasures, including	
	protection of	CAP-06 Maintain existing green infrastructure in	(b) have regard to 'Areas Open for Consideration for Wind Energy Developments' in the Wind Energy Strategy
	designations	Edenderry and encourage and facilitate, in	Designations Map from the County Wind Energy Strategy;
	relating to the	consultation with relevant stakeholders, the	(c) the impact of the proposed wind farm development on proposed Wilderness Corridors as detailed in Objective
	landscape.	development of green infrastructure that	BLO-28 of Chapter 4;
		recognises the synergies that can be achieved	(d) have regard to Development Management Standard 109 on wind farms contained in Chapter 13 of this Plan;
		with regard to the following:  • Provision of open space amenities;	and (e) have regard to existing and future international, European, national and regional policy, directives and
		Sustainable management of water;	legislation.
		<ul> <li>Protection and management of biodiversity;</li> </ul>	REDP–19 (Extractive Industry)
		Protection of cultural heritage; and	It is Council policy to ensure those extractions (quarries / sand and gravel pits) which would result in a reduction of the
		<ul> <li>Protection of protected landscape sensitivities.</li> </ul>	visual amenity of Areas of High Amenity, eskers, esker landscapes, protected views or damage to designated sites,
			habitat types or species shall not be permitted. It is Council policy that all such workings should be subjected to
			landscaping requirements and that worked out quarries should be rehabilitated to a use agreed with the Council which
			could include recreational, biodiversity, amenity or other end-of-life uses. Planning applications for extraction shall be
			assessed against section 28 Ministerial Guidelines. The use of these rehabilitated sites shall be limited to wastes such as
			soil, stone and subsoils and sites shall be authorised under the appropriate waste regulations. Where the Council
			considers and accepts that in cases where inert material (for example soil, stones and subsoil) cannot be recycled or otherwise sold, such materials may be considered for the phased restoration and landscaping of the site in line with
			planning conditions imposed.
			Various Provisions relating to Landscape (BLP-38 to 42 and BLO-23 to 25)
			It is Council policy to protect and enhance the county's landscape, by ensuring that development retains, protects and
			where necessary, enhances the appearance and character of the county's existing landscape.
			It is Council policy to seek to ensure that local landscape features, including historic features and buildings, hedgerow,
			shelter belts and stone walls, are retained, protected and enhanced where appropriate, so as to preserve the local landscape and character of an area, whilst providing for future development.
			It is Council policy to ensure that consideration of landscape sensitivity is an important factor in determining
			development uses.
			It is Council policy to require a Landscape/Visual Impact Assessment to accompany significant proposals, located within
			or adjacent to sensitive landscapes. This assessment will provide details of proposed mitigation measures to address
			likely negative impacts.
			It is Council policy to control advertising structures and hoardings in the open countryside. The Council will use its
			enforcement powers under the Planning and Development Act 2000 (as amended) to secure the removal of
			unauthorised advertising signs and hoardings including those that are affixed to trailers, wheeled vehicles etc.  Landscape
			It is an objective of the Council to prepare a County Landscape Character Assessment in accordance with all relevant
			legislation and guidance documents and following the forthcoming National and Regional Landscape Character
			Assessment. It is an objective of the Council to have regard to the Landscape Sensitivity Areas in Tables 4.18, 4.19 and
			4.20 in the consideration of planning applications. It is an objective of the Council to protect skylines and ridgelines from
			development where such developments will create significant visual intrusion.
			Various Provisions relating to Protection of Key Scenic Views, Key Prospects and Key Amenity Routes
			(BLP-43 and BLO-26)
			It is Council policy to require a Landscape/Visual Impact Assessment to accompany significant proposals that are likely to
			significantly affect Key Scenic Views and Prospects as listed in Table 4.21 and Key Amenity Routes as listed in Table
			4.22. It is an objective of the Council to protect Key Scenic Views and Key Prospects contained in Table 4.21, and Key
			Amenity Routes as listed in Table 4.22 from inappropriate development.

Various Provisions relating to Areas of High Amenity (BLP-35 to 37 and BLO-22)

SA	Potentially Significant Adverse Effect, f Unmitigated	Draft Local Area Plan measures, including	Existing Offaly County Development Plan 2021-2027 measures, including
			It is Council policy to protect and preserve the county's Areas of High Amenity namely the Slieve Bloom Mountains, Clonmacnoise Heritage Zone, Durrow High Cross, Abbey and surrounding area, the River Shannon, Lough Boora Discovery Park, Grand Canal, Croghan Hill, Raheenmore Bog, Pallas Lake, Clara Bog, Clara eskers, Eiscir Riada and other eskers. Notwithstanding the location of certain settlements, or parts of, for which there are settlement plans (Towns, Villages, Sraids), within the Areas of High Amenity, it is not the intention of this policy to hinder appropriate sustainable levels of development (as set out in the plans and subject to proper planning). Further, it is policy to facilitate the sustainable extension and expansion of existing visitor, tourist related or other rural enterprises within the Areas of High Amenity, where such development is appropriate and where it can be demonstrated that it gives 'added value' to the extending activity and to the immediate area which is the subject of the 'Area of High Amenity' designation. It is Council policy, to ensure that issues of scale, siting, design and overall compatibility (including particular regard to environmental sensitivities) with a site's location within an Area of High Amenity are of paramount importance when assessing any application for planning permission. The merits of each proposal will be examined on a case-by case basis. It is Council policy to support the preparation of a masterplan that conserves and protects the Clonmacnoise monastic site and will co-operate with the Office of Public Works and other stakeholders in its preparation and implementation. It is an objective of the Council to ensure that new development, whether individually or cumulatively, does not impinge in any significant way on the character, integrity and distinctiveness of or the scenic value of the Areas of High Amenity listed in Table 4.17. New development in Areas of High Amenity shall not be permitted if it;  Causes unacceptable visual harm; Introduces incongru

## **Section 10 Monitoring Measures**

#### 10.1 Introduction

The SEA Directive requires that the significant environmental effects of the implementation of plans and programmes are monitored. This section details the measures which will be used in order to monitor the likely significant effects of implementing the Plan.

Monitoring can both demonstrate the positive effects facilitated by the Plan and can enable, at an early stage, the identification of unforeseen adverse effects and the undertaking of appropriate remedial action.

The occurrence of significant adverse environmental effects not predicted and mitigated by this assessment, which are directly attributable to the implementation of the Plan, would necessitate consideration of these effects in the context of the Plan and potential remediation action(s) and/or review of part(s) of the Plan.

### 10.2 Indicators and Targets

Monitoring is based around indicators which allow quantitative measures of trends and progress over time relating to the Strategic Environmental Objectives identified in Section 5 and used in the evaluation. Each indicator to be monitored is accompanied by the target(s) which were identified with regard to the relevant strategic actions. Given the position of the Local Area Plan in the land use planning hierarchy beneath the Offaly Development Plan 2021-2027, the measures identified in that County Development Plan SEA have been used as they are or having been slightly modified - in most instances. This consistency across the hierarchy of land use plans will improve the efficiency and effectiveness of future monitoring.

Table 10.1 overleaf shows the indicators and targets which have been selected for monitoring the likely significant environmental effects of implementing the Plan, if unmitigated.

Monitoring is an ongoing process and the programme allows for flexibility and the

further refinement of indicators and targets. The Monitoring Programme may be updated to deal with specific environmental issues – including unforeseen effects – as they arise.

#### 10.3 Sources

The Plan forms part of the wider land use planning framework comprising a hierarchy of policies, plans, programmes, etc. This wider framework, including the National Planning Framework, the Eastern and Midland RSES and the Offaly County Development Plan is subject to its own SEA (and associated monitoring) requirements. Individual projects will be subject to their own monitoring requirements as relevant.

In implementing the Monitoring Programme the Council will take into account this hierarchy of planning and environmental monitoring.

Sources for indicators may include existing monitoring databases (including those maintained by planning authorities national/regional government departments and agencies) and the output of lower-tier environmental assessment and making (including a review of project approvals granted and associated documents and the output of any EIA monitoring programmes).

Internal monitoring of the environmental effects of grants of permission in the Council would provide monitoring of certain indicators on a *grant of permission*<sup>54</sup> basis. Where significant adverse effects as a result of the development to be permitted are identified, such effects could be identified, recorded and used to inform monitoring evaluation.

<sup>&</sup>lt;sup>54</sup> The likely significant effects of development proposals on environmental sensitivities are further determined during the development management process. Documenting any identified effects as a result of a development to be permitted can help to fulfill monitoring requirements.

### 10.4 Reporting

A stand-alone Monitoring Report on the significant environmental effects of implementing the Plan will be prepared in advance of the beginning of the review of the Plan. This report should address the indicators set out on Table 10.1.

Interim reporting may be undertaken as part of reporting on the County Development Plan and other Local Area Plans.

The Council is responsible for the ongoing review of indicators and targets, collating existing relevant monitored data, the preparation of monitoring evaluation report(s), the publication of these reports and, if necessary, the carrying out of remedial action.

Table 10.1 Indicators, Targets, Sources and Remedial Action

Environmental	SEO	rs, Targets, Sources and Remed Indicators	Targets	Sources	Remedial Action
Component	Code		•		
Biodiversity, Flora and Fauna	BFF	Condition of European sites Number of spatial plans that have included ecosystem services content, mapping and policy to protect ecosystem services when their relevant plans are either revised or drafted SEA and AA as relevant for new Council policies, plans, programmes etc. Status of water quality in the County's water bodies Compliance of planning permissions with Plan measures providing for the protection of Biodiversity and flora and fauna – see County Development Plan Chapter 4 "Biodiversity and Landscape" and Local Area Plan Chapter 6 "Biodiversity and Green Infrastructure"	<ul> <li>Require all local level land use plans to include ecosystem services and green/blue infrastructure provisions in their land use plans and as a minimum, to have regard to the required targets in relation to the conservation of European sites, other nature conservation sites, ecological networks, and protected species</li> <li>Implement and review, as relevant, the Biodiversity Plan for Offaly as incorporated into the Offaly Heritage Plan 2017-21</li> <li>For planning permission to be only granted when applications demonstrate that they comply with all Plan measures providing for the protection of biodiversity and flora and fauna – see County Development Plan Chapter 4 "Biodiversity and Landscape" and Local Area Plan Chapter 6 "Biodiversity and Green Infrastructure"</li> </ul>	<ul> <li>Department of Culture, Heritage and the Gaeltacht report of the implementation of the measures contained in the Habitats Directive - as required by Article 17 of the Directive (every 6 years).</li> <li>Department of Culture, Heritage and the Gaeltacht National Monitoring Report for the Birds Directive under Article 12 (every 3 years)</li> <li>Internal monitoring of preparation of local land use plans</li> <li>Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).</li> <li>Consultations with the NPWS (at monitoring evaluation - see Section 10.4)</li> </ul>	<ul> <li>Where condition of European sites is found to be deteriorating this will be investigated with the Regional Assembly and the DCHG (and the DHPLG for water) to establish if the pressures are related to Plan actions / activities. A tailored response will be developed in consultation with these stakeholders in such a circumstance.</li> <li>Where water bodies are failing to meet at least good status this will be investigated with the DHPLG Water Section, the Regional Assembly, the EPA Catchment Unit and, as relevant, Irish Water to establish if the pressures are related to Plan actions / activities. A tailored response will be developed in consultation with these stakeholders in such a circumstance.</li> </ul>
Population and Human Health	РНН	Implementation of Plan measures relating to the promotion of economic growth as provided for by County Development Plan Chapter 5 "Economic Development Strategy" and Local Area Plan Chapter 2 "Economic Development Strategy"     Number of spatial concentrations of health problems arising from environmental factors resulting from development permitted under the Plan     Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures     Number of spatial plans that include specific green infrastructure mapping	<ul> <li>For review of progress on implementing Plan objectives to demonstrate successful implementation of measures relating to the promotion of economic growth as provided for by County Development Plan Chapter 5 "Economic Development Strategy" and Local Area Plan Chapter 2 "Economic Development Strategy"</li> <li>No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan</li> <li>Increase in the proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures.</li> <li>Implementation of Green Infrastructure</li> </ul>	<ul> <li>Internal review of progress on implementing Plan objectives</li> <li>Consultations with the Health Service Executive and EPA</li> <li>CSO data</li> <li>Internal monitoring of preparation of local land use plans</li> </ul>	<ul> <li>Where planning applications in key growth towns are rejected due to insufficient capacity in the waste water treatment plant or failure of the waste water treatment plant to meet Emission Limit Values, the Council will contribute towards a response with the Regional Assembly, EPA and Irish Water to achieve the necessary capacity.</li> <li>Where proportion of population shows increase in private car use above CSO 2016 figures, the Council will coordinate with the Regional Assembly, the DHPLG, DCCAE and NTA to develop a tailored response.</li> </ul>
Soil (and Land)	S	Proportion of population growth occurring on infill and brownfield lands compared to greenfield Volume of contaminated material generated from brownfield and infill Number of AA determinations and environmental assessments undertaken to support applications for brownfield and infill development prior to planning permission	<ul> <li>Maintain built surface cover nationally to below the EU average of 4% as per the NPF.</li> <li>Achieve the 40% target for growth on infill as per the NPF.</li> </ul>	<ul> <li>Environmental Protection Agency (EPA), Geoportal</li> <li>Internal monitoring of likely significant environmental effects of grants of permission (grant by grant)</li> </ul>	Where the proportion of growth on infill and brownfield sites is not keeping pace with the targets set in the NPF and the RSES, the Council will liaise with the Regional Assembly to establish reasons and coordinate actions to address constraints to doing so.

Environmental	SEO	Indicators	Targets	Sources	Remedial Action
Water	W W	Status of water bodies as reported by the EPA Water Monitoring Programme for the WFD     Number of incompatible developments permitted within flood risk areas	Not to cause deterioration in the status of any surface water or affect the ability of any surface water to achieve 'good status' Implementation of the objectives of the second cycle of the River Basin Management Plan (and subsequent iterations as relevant) Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk	EPA Monitoring Programme for WFD compliance     Internal monitoring of likely significant environmental effects of grants of permission (grant by grant)	Where water bodies are failing to meet at least good status this will be investigated with the DHPLG Water Section, the EPA Catchment Unit, the Regional Assembly and, as relevant, Irish Water to establish if the pressures are related to Plan actions / activities. A tailored response will be developed in consultation with these stakeholders in such a circumstance.  Where planning applications in key growth towns are rejected due to insufficient capacity in the Waste water treatment Plant or failure of the plant to meet Emission Limit Values, the Eastern and Midland Regional Assembly will coordinate a response between the relevant local authority, EPA and Irish Water to achieve the necessary capacity.  The Council will engage, as relevant, with the Eastern and Midland Regional Assembly and the OPW with respect to planning applications for development in areas of elevated flood risk.
Material Assets	MA	Programmed delivery of Irish Water infrastructure for all key growth towns in line with Irish Water Investment Plan and prioritisation programme to ensure sustainable growth can be accommodated     Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the Plan     Proportion of population within who report regular cycling / walking to school and work above 2016 CSO figures	<ul> <li>To map brownfield and infill land parcels across the County.</li> <li>All new developments granted permission to be connected to and adequately and appropriately served by waste water treatment over the lifetime of the Plan</li> <li>Where septic tanks are proposed, for planning permission to be only granted when applications demonstrate that the outfall from the septic tank will not – incombination with other septic tanks—contribute towards any surface or ground water body not meeting the objective of good status under the Water Framework Directive</li> <li>Increased budget spends on water and waste water infrastructure</li> <li>By 2020 all citizens will have access to speeds of 30Mbps, and that 50% of citizens will be subscribing to speeds of 100Mbps</li> </ul>	Internal monitoring of likely significant environmental effects of grants of permission (grant by grant) CSO data Consultations with Irish Water (at monitoring evaluation - see Section 10.4) Department of Housing, Planning and Local Government in conjunction with Local Authorities Department of Communications, Climate Action and Environment Department of Public Expenditure and Reform	Where planning applications in key growth towns are rejected due to insufficient capacity in the waste water treatment plant or failure of the waste water treatment plant to meet Emission Limit Values, the Council will coordinate a response between the Regional Assembly, EPA and Irish Water to achieve the necessary capacity.  Where proportion of population shows increase in private car use above CSO 2016 figures, the Council will coordinate with the Regional Assembly, DHPLG and NTA to develop a tailored response.

Environmental	SEO	Indicators	Targets	Sources	Remedial Action
Air	A	Proportion of journeys made by private fossil fuel-based car compared to 2016 National Travel Survey levels of 74%  NO <sub>x</sub> , SO <sub>x</sub> , PM10 and PM2.5 as part of Ambient Air Quality Monitoring	<ul> <li>Decrease in proportion of journeys made by private fossil fuel-based car compared to 2016 National Travel Survey levels.</li> <li>Improvement in Air Quality trends, particularly in relation to transport related emissions of NO<sub>x</sub> and particulate matter</li> </ul>	CSO data Data from the National Travel Survey EPA Air Quality Monitoring Consultations with Department of Transport Tourism and Sport, Transport Trends and Department of Communication Climate Action and Environment (at monitoring evaluation - see Section 10.4)	Where proportion of population shows increase in private car use above CSO 2016 figures, Council will coordinate with the Regional Assembly, DHPLG, DCCAE and NTA to develop a tailored response. See also entry under Population and human health above
Climatic Factors	С	Implementation of Plan measures relating to climate reduction targets as provided for by Plan provisions including those provided for and referenced in County Development Plan Chapter 3 "Climate Action and Energy" and Local Area Plan Chapter 8 "Climate Action"  Proportion of journeys made by private fossil fuel-based car compared to 2016 levels  Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures	<ul> <li>For review of progress on implementing Plan objectives to demonstrate successful implementation of measures climate reduction targets as provided for by Plan provisions including those provided for and referenced in County Development Plan Chapter 3 "Climate Action and Energy" and Local Area Plan Chapter 8 "Climate Action"</li> <li>Increase in the proportion of people resident in the County reporting regular cycling / walking to school and work above 2016 CSO figures</li> <li>Decrease in the proportion of journeys made by residents of the County using private fossil fuel-based car compared to 2016 levels</li> <li>Contribute towards transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050</li> <li>Contribute towards the target of the Renewable Energy Directive (2009/28/EC), for all Member States to reach a 10% share of renewable energy in transport by 2020</li> <li>Contribute towards the target of aggregate reduction in carbon dioxide (CO<sub>2</sub>) emissions of at least 80% (compared to 1990 levels) by 2050 across the electricity generation, built environment and transport sectors</li> <li>To promote reduced energy consumption and support the uptake of renewable options and a move away from solid fuels for residential heating</li> </ul>	EPA Annual National Greenhouse Gas Emissions Inventory reporting     Climate Action Regional Office     Consultations with Department of Communication Climate Action and Environment (at monitoring evaluation - see Section 10.4)     CSO data	Where trends toward carbon reduction are not recorded, the Council will liaise with the Regional Assembly to establish reasons and develop solutions     Where proportion of population shows increase in private car use above CSO 2016 figures, the Council will coordinate with the Regional Assembly, DHPLG and NTA to develop a tailored response

Environmental	SEO	Indicators	Targets	Sources	Remedial Action
Component	Code				
Cultural Heritage	CH	Percentage of entries to the Record of Monuments and Places, and the context these entries within the surrounding landscape where relevant, protected from adverse effects resulting from development which is granted permission under the Plan     Percentage of entries to the Record of Protected Structures and Architectural Conservation Areas and their context protected from significant adverse effects arising from new development granted	Protect entries to the Record of Monuments and Places, and the context of these entries within the surrounding landscape where relevant, from adverse effects resulting from development which is granted permission under the Plan     Protect entries to the Record of Protected Structures and Architectural Conservation Areas and their context from significant adverse effects arising from new development granted permission under the Plan	Internal monitoring of likely significant environmental effects of grants of permission (grant by grant)     Consultation with Department of Culture, Heritage and the Gaeltacht (at monitoring evaluation - see Section 10.4).	Where monitoring reveals visitor or development pressure is causing negative effects on designated archaeological or architectural heritage, the Council will work with the Regional Assembly, Failte Ireland and the National Monuments Service and other stakeholders, as relevant, to address pressures through additional mitigation
Landscape	L	permission under the Plan  Number of developments permitted which result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in Land Use Plans, resulting from development which is granted permission under the Plan	No developments permitted which result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in Land Use Plans, resulting from development which is granted permission under the Plan To seek to align with the National Landscape Strategy	Internal monitoring of likely significant environmental effects of grants of permission (grant by grant)	Where monitoring reveals developments permitted which result in avoidable adverse visual impacts on the landscape, the Council will re-examine Plan provisions and the effectiveness of their implementation

# Appendix I Relationship with Legislation and Other Policies, Plans and Programmes

This appendix is not intended to be a full and comprehensive review of EU Directives, the transposing regulations or the regulatory framework for environmental protection and management. The information is not exhaustive and it is recommended to consult the Directive, Regulation, Plan or Programme to become familiar with the full details of each.

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
European Level			
SEA Directive (2001/42/EC)	Contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development. Provide for a high level of protection of the environment by carrying out an environmental assessment of plans and programmes which are likely to have significant effects on the environment.	referred to in Articles 2 to 4 of the Directive.  • Prepare an environmental report which identifies, describes and	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EIA Directive (2011/92/EU as amended by 2014/52/EU)	<ul> <li>Requires the assessment of the environmental effects of public and private projects which are likely to have significant effects on the environment.</li> <li>Aims to assess and implement avoidance or mitigation measures to eliminate environmental effects, before consent is given of projects likely to have significant effects on the environment by virtue, inter alia, of their nature, size or location are made subject to a requirement for development consent and an assessment with regard to their effects. Those projects are defined in Article 4.</li> </ul>	All projects listed in Annex I are considered as having significant effects on the environment and require an EIA.     For projects listed in Annex II, a "screening procedure" is required to determine the effects of projects on the basis of thresholds/criteria or a case by case examination. This should take into account Annex III.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Habitats Directive (92/43/EEC)	<ul> <li>Promote the preservation, protection and improvement of the quality of the environment, including the conservation of natural habitats and of wild fauna and flora.</li> <li>Contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora.</li> <li>Maintain or restore to favourable conservation status, natural habitats and species of wild fauna and flora of community interest.</li> <li>Promote the maintenance of biodiversity, taking account of economic, social, cultural and regional requirements.</li> </ul>	<ul> <li>Propose and protect sites of importance to habitats, plant and animal species.</li> <li>Establish a network of European sites hosting the natural habitat types</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Birds Directive (2009/147/EC)	Conserve all species of naturally occurring birds in the wild state including their eggs, nests and habitats.     Protect, manage and control these species and comply with regulations relating to their exploitation.     The species included in Annex I shall be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution.	<ul> <li>Preserve, maintain or re-establish a sufficient diversity and area of habitats for all the species of birds referred to in Annex 1.</li> <li>Preserve, maintain and establish biotopes and habitats to include the creation of protected areas (Special Protection Areas).</li> <li>Ensure the upkeep and management in accordance with the ecological needs of habitats inside and outside the protected zones, re-establish destroyed biotopes and creation of biotopes.</li> <li>Measures for regularly occurring migratory species not listed in Annex I is required as regards their breeding, moulting and wintering areas and staging posts along their migration routes. The protection of wetlands and particularly wetlands of international importance.</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Nitrates Directive (91/676/EC)	Reducing water pollution caused or induced by nitrates from agricultural sources and - preventing further such pollution.	Ireland's Nitrates Action Programme is designed to prevent pollution of surface waters and ground water from agricultural sources and to protect and improve water quality. Ireland's third NAP came into operation in 2014. Each Member State's NAP must include:  • a limit on the amount of livestock manure applied to the land each year  • set periods when land spreading is prohibited due to risk  • set capacity levels for the storage of livestock manure	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Integrated Pollution Prevention Control Directive (2008/1/EC)	The purpose of this Directive is to achieve integrated prevention and control of pollution arising from the activities listed in Annex I. It lays down measures designed to prevent or, where that is not practicable, to reduce emissions in the air, water and land from the abovementioned activities, including measures concerning waste, in order to achieve a high level of protection of the environment taken as a whole, without prejudice to Directive 85/337/EEC and other relevant Community provisions.	The IPPC Directive is based on several principles:	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Plant Protection (products) Directive 2009/127/EC	The Directive aims at reducing the risks and impacts of pesticide use on human health and the environment by introducing different targets, tools and measures such as Integrated Pest Management (IPM) or National Action Plans (NAPs).	The Framework Directive applies to pesticides which are plant protection products. Regarding pesticide application equipment already in professional use, the Framework Directive introduces requirements for the inspection and maintenance to be carried out on such equipment.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Renewables Directive (2009/28/EC)	The Renewable Energy Directive establishes an overall policy for the production and promotion of energy from renewable sources in the EU. It requires the EU to fulfil at least 20% of its total energy needs with renewables by 2020 – to be achieved through the attainment of individual national targets.	The Directive promotes cooperation amongst EU countries (and with countries outside the EU) to help them meet their renewable energy targets.  The Directive specifies national renewable energy targets for each country, taking into account its starting point and overall potential for renewables.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	All EU countries must also ensure that at least 10% of their transport fuels come from renewable sources by 2020.	EU countries set out how they plan to meet these targets and the general course of their renewable energy policy in national renewable energy action plans.     Progress towards national targets is measured every two years when EU countries publish national renewable energy progress reports.	comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Indirect Land Use Change Directive (2012/0288(COD))	<ul> <li>Article 3(4) of Directive 2009/28/EC of the European Parliament and of the Council (3) requires Member States to ensure that the share of energy from renewable energy sources in all forms of transport in 2020 is at least 10 % of their final energy consumption.</li> <li>The blending of biofuels is one of the methods available for Member States to meet this target, and is expected to be the main contributor.</li> <li>Other methods available to meet the target are the reduction of energy consumption, which is imperative because a mandatory percentage target for energy from renewable sources is likely to become increasingly difficult to achieve sustainably if overall demand for energy for transport continues to rise, and the use of electricity from renewable energy sources.</li> </ul>	Limit the contribution that conventional biofuels (with a risk of ILUC emissions) make towards attainment of the targets in the Renewable Energy Directive; Improve the greenhouse gas performance of biofuel production processes (reducing associated emissions) by raising the greenhouse gas saving threshold for new installations subject to protecting installations already in operation on 1st July 2014; Encourage a greater market penetration of advanced (low-ILUC) biofuels by allowing such fuels to contribute more to the targets in the Renewable Energy Directive than conventional biofuels; Improve the reporting of greenhouse gas emissions by obliging Member States and fuel suppliers to report the estimated indirect land-use change emissions of biofuels.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Alternative Fuels Infrastructure Directive (2014/94/EU)	This Directive establishes a common framework of measures for the deployment of alternative fuels infrastructure in the Union in order to minimise dependence on oil and to mitigate the environmental impact of transport.	This Directive sets out minimum requirements for the building-up of alternative fuels infrastructure, including recharging points for electric vehicles and refuelling points for natural gas (LNG and CNG) and hydrogen, to be implemented by means of Member States' national policy frameworks, as well as common technical specifications for such recharging and refuelling points, and user information requirements.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Energy Efficiency Directive (2012/27/EU)	Establishes a set of binding measures to help the EU reach its 20% energy efficiency target by 2020.     Under the Directive, all EU countries are required to use energy more efficiently at all stages of the energy chain, from production to final consumption.	<ul> <li>Energy distributors or retail energy sales companies have to achieve 1.5% energy savings per year through the implementation of energy efficiency measures</li> <li>EU countries can opt to achieve the same level of savings through other means, such as improving the efficiency of heating systems, installing double glazed windows or insulating roofs</li> <li>The public sector in EU countries should purchase energy efficient buildings, products and services</li> <li>Every year, governments in EU countries must carry out energy efficient renovations on at least 3% (by floor area) of the buildings they own and occupy</li> <li>Energy consumers should be empowered to better manage consumption. This includes easy and free access to data on consumption through individual metering</li> <li>National incentives for SMEs to undergo energy audits</li> <li>Large companies will make audits of their energy consumption to help them identify ways to reduce it</li> <li>Monitoring efficiency levels in new energy generation capacities.</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Seveso Directive (2012/18/EU)	This Directive lays down rules for the prevention of major accidents which involve dangerous substances, and the limitation of their consequences for human health and the environment, with a view to ensuring a high level of protection throughout the Union in a consistent and effective	The Seveso Directive is well integrated with other EU policies, thus avoiding double regulation or other administrative burden. This includes the following related policy areas:  Classification, labelling and packaging of chemicals;  The Union's Civil Protection Mechanism;	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may

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	manner.	The Security Union Agenda including CBRN-E and Protection of critical infrastructure; Policy on environmental liability and on the protection of the environment through criminal law; Safety of offshore oil and gas operations.	arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Biodiversity Strategy for 2030 - Bringing nature back into our lives (European Commission, 2020)	The EU's biodiversity strategy for 2030 is a comprehensive, ambitious and long-term plan to protect nature and reverse the degradation of ecosystems. The strategy aims to put Europe's biodiversity on a path to recovery by 2030, and contains specific actions and commitments.	<ul> <li>The Strategy contains specific commitments and actions to be delivered by 2030, including:</li> <li>Establishing a larger EU-wide network of protected areas on land and at sea, building upon existing Natura 2000 areas, with strict protection for areas of very high biodiversity and climate value.</li> <li>An EU Nature Restoration Plan - a series of concrete commitments and actions to restore degraded ecosystems across the EU by 2030, and manage them sustainably, addressing the key drivers of biodiversity loss.</li> <li>A set of measures to enable the necessary transformative change: setting in motion a new, strengthened governance framework to ensure better implementation and track progress, improving knowledge, financing and investments and better respecting nature in public and business decision-making.</li> <li>Measures to tackle the global biodiversity challenge, demonstrating that the EU is ready to lead by example towards the successful adoption of an ambitious global biodiversity framework under the Convention on Biological Diversity.</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Green Infrastructure Strategy	Aims to create a robust enabling framework in order to promote and facilitate Green Infrastructure (GI) projects.	<ul> <li>Promoting GI in the main EU policy areas.</li> <li>Supporting EU-level GI projects.</li> <li>Improving access to finance for GI projects.</li> <li>Improving information and promoting innovation.</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
UN Kyoto Protocol (2 <sup>nd</sup> Kyoto Period), the Second European Climate Change Programme (ECCP II), Paris climate conference (COP21) 2015 (Paris Agreement)	greenhouse gas emissions.	The Kyoto Protocol is implemented through the European Climate Change Programme (ECCP II).  EU member states implement measures to improve on or compliment the specified measures and policies arising from the ECCP.  Under COP21, governments agreed to come together every 5 years to set more ambitious targets as required by science; report to each other and the public on how well they are doing to implement their targets; track progress towards the long-term goal through a robust transparency and accountability system.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU 2020 Climate and Energy Package	Binding legislation which aims to ensure the European Union meets its climate and energy targets for 2020. Aims to achieve a 20% reduction in EU greenhouse gas emissions from 1990 levels. Aims to raise the share of EU energy consumption produced from renewable resources to 20%. Achieve a 20% improvement in the EU's energy efficiency.	Four pieces of complimentary legislation:  Reform of the EU Emissions Trading System (EU ETS) to include a cap on emission allowances in addition to existing system of national caps.  Member States have agreed national targets for non-EU ETS emissions from countries outside the EU.  Meet the national renewable energy targets of 16% for Ireland by 2020.  Preparing a legal framework for technologies in carbon capture and	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and

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		storage.	align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU 2030 Framework for Climate and Energy	A 2030 Framework for climate and energy, including EU-wide targets and policy objectives for the period between 2020 and 2030 that has been agreed by European countries.     Targets include a 40% cut in greenhouse gas emissions compared to 1990 levels, at least a 27% share of renewable energy consumption and at least 27% energy savings compared with the business-as-usual scenario.	To meet the targets, the European Commission has proposed the following policies for 2030:  A reformed EU emissions trading scheme (ETS).  New indicators for the competitiveness and security of the energy system, such as price differences with major trading partners, diversification of supply, and interconnection capacity between EU countries.  First ideas for a new governance system based on national plans for competitive, secure, and sustainable energy. These plans will follow a common EU approach. They will ensure stronger investor certainty, greater transparency, enhanced policy coherence and improved coordination across the EU.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
The Clean Air for Europe Directive (2008/50/EC) (EU Air Framework Directive)  Fourth Daughter Directive (2004/107/EC)	<ul> <li>The CAFE Directive merges existing legislation into a single directive (except for the fourth daughter directive).</li> <li>Sets new air quality objectives for PM<sub>2.5</sub> (fine particles) including the limit value and exposure related objectives.</li> <li>Accounts for the possibility to discount natural sources of pollution when assessing compliance against limit values.</li> <li>Allows the possibility for time extensions of three years (PM<sub>10</sub>) or up to five years (NO<sub>2</sub>, benzene) for complying with limit values, based on conditions and the assessment by the European Commission.</li> <li>The Fourth Daughter Directive lists pollutants, target values and monitoring requirements for the following: arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air.</li> </ul>	<ul> <li>Sets objectives for ambient air quality designed to avoid, prevent or reduce harmful effects on human health and the environment as a whole.</li> <li>Aims to assess the ambient air quality in Member States on the basis of common methods and criteria.</li> <li>Obtains information on ambient air quality in order to help combat air pollution and nuisance and to monitor long-term trends and improvements resulting from national and community measures.</li> <li>Ensures that such information on ambient air quality is made available to the public.</li> <li>Aims to maintain air quality where it is good and improving it in other cases.</li> <li>Aims to promote increased cooperation between the Member States in reducing air pollution.</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Noise Directive (2002/49/EC)	The Noise Directive - Directive 2002/49/EC relating to the assessment and management of environmental noise - is part of an EU strategy setting out to reduce the number of people affected by noise in the longer term and to provide a framework for developing existing Community policy on noise reduction from source.	<ul> <li>The Directive requires competent authorities in Member States to:</li> <li>Draw up strategic noise maps for major roads, railways, airports and agglomerations, using harmonised noise indicators and use these maps to assess the number of people which may be impacted upon as a result of excessive noise levels;</li> <li>Draw up action plans to reduce noise where necessary and maintain environmental noise quality where it is good; and</li> <li>Inform and consult the public about noise exposure, its effects, and the measures considered to address noise.</li> <li>The Directive does not set any limit value, nor does it prescribe the measures to be used in the action plans, which remain at the discretion of the competent authorities.</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Floods Directive (2007/60/EC)	Establishes a framework for the assessment and management of flood risks     Reduce adverse consequences for human health, the environment, cultural heritage and economic activity associated with floods in the Community	<ul> <li>Assess all water courses and coast lines at risk from flooding through Flood Risk Assessment</li> <li>Prepare flood hazard maps and flood risk maps outlining the extent or potential of flooding and assets and humans at risk in these areas at River Basin District level (Article 3(2) (b)) and areas covered by Article 5(1) and Article 13(1) (b) in accordance with paragraphs 2 and 3.</li> <li>Implement flood risk management plans and take adequate and coordinated measures to reduce flood risk for the areas covered by the</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		Articles listed above.  Inform the public and allow the public to participate in planning process.	towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Water Framework Directive (2000/60/EC)	Establish a framework for the protection of water bodies to include inland surface waters, transitional waters, coastal waters and groundwater and their dependent wildlife and habitats.      Preserve and prevent the deterioration of water status and where necessary improve and maintain "good status" of water bodies.      Promote sustainable water usage.      The Water Framework Directive repealed the following Directives:	<ul> <li>Protect, enhance and restore all water bodies and meet the environmental objectives outlined in Article 4 of the Directive.</li> <li>Achieve "good status" for all waters.</li> <li>Manage water bodies based on identifying and establishing river basins districts.</li> <li>Involve the public and streamline legislation.</li> <li>Prepare and implement a River Basin Management Plan for each river basin districts identified and a Register of Protected Areas.</li> <li>Establish a programme of monitoring for surface water status, groundwater status and protected areas.</li> <li>Recover costs for water services.</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Groundwater Directive (2006/118/EC)	<ul> <li>Protect, control and conserve groundwater.</li> <li>Prevent the deterioration of the status of all bodies of groundwater.</li> <li>Implements measures to prevent and control groundwater pollution, including criteria for assessing good groundwater chemical status and criteria for the identification of significant and sustained upward trends and for the definition of starting points for trend reversals.</li> </ul>	Meet minimum groundwater standards listed in Annex 1 of Directive.     Meet threshold values adopted by national legislation for the pollutants, groups of pollutants and indicators of pollution which have been identified as contributing to the characterisation of bodies or groups of bodies of groundwater as being at risk, also taking into account Part B of Annex II.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Drinking Water Directive (98/83/EC)	Improve and maintain the quality of water intended for human consumption.     Protect human health from the adverse effects of any contamination of water intended for human consumption by ensuring that it is wholesome and clean.	<ul> <li>Set values applicable to water intended for human consumption for the parameters set out in Annex I.</li> <li>Set values for additional parameters not included in Annex I, where the protection of human health within national territory or part of it so requires. The values set should, as a minimum, satisfy the requirements of Article 4(1) (a).</li> <li>Implement all measures necessary to ensure that regular monitoring of the quality of water intended for human consumption is carried out, in order to check that the water available to consumers meets the requirements of this Directive and in particular the parametric values set in accordance with Article 5.</li> <li>Ensure that any failure to meet the parametric values set in accordance with Article 5 is immediately investigated in order to identify the cause.</li> <li>Ensure that the necessary remedial action is taken as soon as possible to restore its quality and shall give priority to their enforcement action.</li> <li>Undertake remedial action to restore the quality of the water where necessary to protect human health.</li> <li>Notify consumers when remedial action is being undertaken except where the competent authorities consider the non-compliance with the parametric value to be trivial.</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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Urban Waste Water Treatment Directive (91/271/EEC)	<ul> <li>This Directive concerns the collection, treatment and discharge of urban waste water and the treatment and discharge of waste water from certain industrial sectors.</li> <li>The objective of the Directive is to protect the environment from the adverse effects of waste water discharges.</li> </ul>	<ul> <li>Urban waste water entering collecting systems shall before discharge, be subject to secondary treatment.</li> <li>Annex II requires the designation of areas sensitive to eutrophication which receive water discharges.</li> <li>Establishes minimum requirements for urban waste water collection and treatment systems in specified agglomerations to include special requirements for sensitive areas and certain industrial sectors.</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Environmental Liability Directive (2004/35/EC) as amended by Directive 2006/21/EC, Directive 2009/31/EC and Directive 2013/30/EU	Establish a framework of environmental liability based on the 'polluter-pays' principle, to prevent and remedy environmental damage.  The provided HTML remedy environmental damage is a second environmental damage.  The provided HTML remedy environmental liability based on the 'polluter-pays' principle, to prevent and remedy environmental damage.		Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Convention on the Protection of the Archaeological Heritage (Valletta 1992)	The aim of this (revised) Convention is to protect the archaeological heritage as a source of the Europear collective memory and as an instrument for historical and scientific study.	The Valletta Convention makes the conservation and enhancement of the archaeological heritage one of the goals of urban and regional planning	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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Convention of the Protection of the Architectural Heritage of Europe (Granada 1995)	The main purpose of the Convention is to reinforce and promote policies for the conservation and enhancement of Europe's heritage. It also affirms the need for European solidarity with regard to heritage conservation and is designed to foster practical co-operation among the Parties. It establishes the principles of "European co-ordination of conservation policies" including consultations regarding the thrust of the policies to be implemented.	<ul> <li>The reinforcement and promotion of policies for protecting and enhancing the heritage within the territories of the parties.</li> <li>The affirmation of European solidarity with regard to the protection of the heritage and the fostering of practical co-operation between states and regions.</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Council of Europe Framework Convention on the Value of Cultural Heritage for Society (Faro 2005)	<ul> <li>Cultural heritage is a group of resources inherited from the past which people identify, independently of ownership, as a reflection and expression of their constantly evolving values, beliefs, knowledge and traditions. It includes all aspects of the environment resulting from the interaction between people and places through time.</li> <li>A heritage community consists of people who value specific aspects of cultural heritage which they wish, within the framework of public action, to sustain and transmit to future generations.</li> </ul>	<ul> <li>Recognise that rights relating to cultural heritage are inherent in the right to participate in cultural life, as defined in the Universal Declaration of Human Rights.</li> <li>Recognise individual and collective responsibility towards cultural heritage.</li> <li>Emphasise that the conservation of cultural heritage and its sustainable use have human development and quality of life as their goal.</li> <li>Take the necessary steps to apply the provisions of this Convention concerning the role of cultural heritage in the construction of a peaceful and democratic society.</li> <li>Greater synergy of competencies among all the public, institutional and private actors concerned.</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Landscape Convention 2000	The developments in agriculture, forestry, industrial and mineral production techniques, together with the practices followed in town and country planning, transport, networks, tourism and recreation, and at a more general level, changes in the world economy, have in many cases accelerated the transformation of landscapes. The Convention expresses a concern to achieve sustainable development based on a balanced and harmonious relationship between social needs, economic activity and the environment. It aims to respond to the public's wish to enjoy high quality landscapes.	Promote protection, management and planning of landscapes.     Organise European co-operation on landscape issues.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
The Seventh Environmental Action Programme (EAP) of the European Community (2013- 2020)	It identifies three key objectives:  to protect, conserve and enhance the Union's natural capital to turn the Union into a resource-efficient, green, and competitive low-carbon economy to safeguard the Union's citizens from environment-related pressures and risks to health and wellbeing	Four so called "enablers" will help Europe deliver on these objectives (goals):  Better implementation of legislation.  Better information by improving the knowledge base.  More and wiser investment for environment and climate policy.  Full integration of environmental requirements and considerations into other policies.  Two additional horizontal priority objectives complete the programme:  To make the Union's cities more sustainable.  To help the Union address international environmental and climate challenges more effectively.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Bern Convention (Convention on the Conservation of European Wildlife and Natural Habitats)	The convention has three main aims:     to conserve wild flora and fauna and their natural habitats     to promote cooperation between states     to give particular attention to endangered and vulnerable species including endangered and vulnerable migratory species	The Parties under the convention recognise the intrinsic value of nature, which needs to be preserved and passed to future generations, they also:  Seek to ensure the conservation of nature in their countries, paying particular attention to planning and development policies and pollution control.  Look at implementing the Bern Convention in central Eastern Europe and	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to

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Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc. the Caucus.	Relevance to the Plan  comply with all environmental legislation and
		<ul> <li>Take account of the potential impact on natural heritage by other policies.</li> <li>Promote education and information of the public, ensuring the need to conserve species is understood and acted upon.</li> <li>Develop an extensive number of species action plans, codes of conducts, and guidelines, at their own initiative or in co-operation with other organisations.</li> <li>Created the Emerald Network, an ecological network made up of Areas of Special Conservation Interest.</li> </ul>	align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Bali Road Map (2007)	The overall goals of the project are twofold:  To increase national capacity to co-ordinate ministerial views, participate in the UNFCCC process, and negotiate positions within the timeframe of the Bali Action Plan; and  To assess investment and financial flows to address climate change for up to three key sectors and/or economic activities.	The Bali Action Plan is centred on four main building Blocks:  mitigation  adaptation  technology  financing	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Cancun Agreements (2010)	Set of decisions taken at the COP 16 Conference in Cancun in 2010 which addresses a series of key issues in the fight against climate change. Cancun Agreements' main objectives cover:  Mitigation Transparency of actions Technology Finance Adaptation Forests Capacity building	Among the most prominent agreements is the establishment of a Green Climate Fund to transfer money from the developed to developing world to tackle the impacts of climate change.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Doha Climate Gateway (2012)	Set of decisions taken at the COP 18 meeting in Doha in 2012 which pave the way for a new agreement in Paris in 2015.	Set out a timetable to adopt a universal climate agreement by 2015 (to come into effect in 2020); Complete the work under Bali Action Plan and to focus on new completing new targets; Strengthen the aim to cut greenhouse gases and help vulnerable countries to adapt; Amend Kyoto Protocol to include a new commitment period for cutting down the greenhouse gases emissions; and Provide the financial and technology support and new institutions to allow clean energy investment and sustainable growth in developing countries.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Common Agricultural Policy	<ul> <li>To improve agricultural productivity, so that consumers have a stable supply of affordable food; and</li> <li>To ensure that EU farmers can make a reasonable living.</li> </ul>	<ul> <li>ensuring viable food production that will contribute to feeding the world's population, which is expected to rise considerably in the future;</li> <li>Climate change and sustainable management of natural resources;</li> <li>Looking after the countryside across the EU and keeping the rural economy alive.</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users

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			and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU REACH Regulation (EC 1907/2006)	Aims to improve the protection of human health and the environment through the better and earlier identification of the intrinsic properties of chemical substances.	The aims are achieved by applying REACH, namely:  Registration,  Living and  Restriction of chemicals.  REACH also aims to enhance innovation and competitiveness of the EU chemicals industry.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Stockholm Convention	The objective of the Stockholm Convention is to protect human health and the environment from persistent organic pollutants.	<ul> <li>Prohibit and/or eliminate the production and use, as well as the import and export, of the intentionally produced POPs that are listed in Annex A to the Convention</li> <li>Restrict the production and use, as well as the import and export, of the intentionally produced POPs that are listed in Annex B to the Convention</li> <li>Reduce or eliminate releases from unintentionally produced POPs that are listed in Annex C to the Convention</li> <li>Ensure that stockpiles and wastes consisting of, containing or contaminated with POPs are managed safely and in an environmentally sound manner</li> <li>To target additional POPs</li> <li>Other provisions of the Convention relate to the development of implementation plans, information exchange, public information, awareness and education, research, development and monitoring, technical assistance, financial resources and mechanisms, reporting, effectiveness evaluation and non-compliance</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Ramsar Convention	The Convention's mission is "the conservation and wise use of all wetlands through local and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world".	<ul> <li>Under the "three pillars" of the Convention, the Contracting Parties commit to:         <ul> <li>Work towards the wise use of all their wetlands;</li> <li>Designate suitable wetlands for the list of Wetlands of International Importance (the "Ramsar List") and ensure their effective management;</li> <li>Cooperate internationally on transboundary wetlands, shared wetland systems and shared species.</li> </ul> </li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European 2020 Strategy for Growth	<ul> <li>Europe 2020 sets out a vision of Europe's social market economy for the 21st century and puts forward three mutually reinforcing priorities:         <ul> <li>Smart growth: developing an economy based on knowledge and innovation;</li> <li>Sustainable growth: promoting a more resource efficient, greener and more competitive economy;</li> <li>Inclusive growth: fostering a high-employment economy delivering social and territorial cohesion.</li> </ul> </li> </ul>	In order to reach these priorities, the Commission proposes five quantitative targets to fulfil by 2020:  1. 75 % of the population aged 20-64 should be employed;  2. 3% of the EU's GDP should be invested in R&D  3. the "20/20/20" climate/energy targets should be met (including an increase to 30% of emissions reduction if the conditions are right);  4. the share of early school leavers should be under 10% and at least 40% of the younger generation should have a tertiary degree;  5. 20 million less people should be at risk of poverty.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
, , , , , , , , , , , , , , , , , , ,			protection and management.
National Level			
Ireland 2040 - Our Plan, the National Planning Framework, and the National Development Plan  Planning, Land Use and	The National Planning Framework is the Government's highlevel strategic plan for shaping the future growth and development of to the year 2040. It is a framework to guide public and private investment, to create and promote opportunities for people, and to protect and enhance the environment - from villages to cities, and everything around and in between.  The National Development Plan sets out the investment priorities that will underpin the successful implementation of the new National Planning Framework. This will guide national, regional and local planning and investment decisions in Ireland over the next two decades, to cater for an expected population increase of over 1 million people.  The PLUTO will take account of forecasted future economic and	National Strategic Outcomes as follows:  1. Compact Growth 2. Enhanced Regional Accessibility 3. Strengthened Rural Economies and Communities 4. Sustainable Mobility 5. A Strong Economy, supported by Enterprise, Innovation and Skills 6. High-Quality International Connectivity 7. Enhanced Amenity and Heritage 8. Transition to a Low-Carbon and Climate-Resilient Society 9. Sustainable Management of Water and other Environmental Resources 10. Access to Quality Childcare, Education and Health Services	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Transport Outlook 2040 [in preparation]	demographic scenarios, affordability considerations and relevant Government policies and will:  1. Quantify in broad terms the appropriate scale of financial investment in land transport over the long term;  2. Consider how fiscal, environmental and technological developments might impact on this investment; and,  3. Identify strategic priorities for future investment to ensure land transport infrastructure provision facilitates the objectives of Project Ireland 2040.	Development, with certain executions is subject to development central.	activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Planning and Development Act 2000 (as amended)	The core principal objectives of this Act are to amend the Planning Acts of 2000 – 2009 with specific regard given to supporting economic renewal and sustainable development.	<ul> <li>Development, with certain exceptions, is subject to development control under the Planning Acts and the local authorities grant or refuse planning permission for development, including ones within protected areas.</li> <li>There are, however, a range of exemptions from the planning system. Use of land for agriculture, peat extraction and afforestation, subject to certain thresholds, is generally exempt from the requirement to obtain planning permission.</li> <li>Additionally, Environmental Impact Assessment (EIA) is required for a range of classes and large-scale projects.</li> <li>Under planning legislation, Development Plans must include mandatory objectives for the conservation of the natural heritage and for the conservation of European sites and any other sites which may be prescribed. There are also discretionary powers to set objectives for the conservation of a variety of other elements of the natural heritage.</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities (Environmental Assessment of Certain Plans and Programmes Regulations 2004 (S.I. 435 of 2004), as amended by S.I. 200 of 2011	The purpose of these Regulations is to transpose into Irish law Directive 2001/42/EC of 27 June 2001 (O.J. No. L 197, 21 July 2001) on the assessment of the effects of certain plans and programmes on the environment — commonly known as the Strategic Environmental Assessment (SEA) Directive.	<ul> <li>The Regulations cover plans and programmes in all of the sectors listed in article 3(2) of the Directive except land-use planning.</li> <li>These Regulations also amend certain provisions of the Planning and Development Act 2000 to provide the statutory basis for the transposition of the Directive in respect of land-use planning.</li> <li>Transposition in respect of the land-use planning sector is contained in the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. No. 436 of 2004).</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477of 2011, as amended)	These Regulations provide a new for the implementation in Ireland of Council Directive 92/43/EEC on habitats and protection of wild fauna and flora (as amended) and for the implementation of Directive 2009/147/EC of the European Parliament and of the Council on the protection of wild birds.	<ul> <li>They provide, among other things, for: the appointment and functions of authorized officers; identification, classification and other procedures relative to the designation of Community sites.</li> <li>The Regulations have been prepared to address several judgments of the CJEU against Ireland, notably cases C-418/04 and C-183/05, in respect of failure to transpose elements of the Birds Directive and the Habitats Directive into Irish law.</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Waste Management Act 1996, as amended	and control of waste; to give effect to provisions of certain acts adopted by institutions of the European communities in respect of those matters; to amend the Environmental Protection Agency Act, 1992, and to repeal certain enactments and to provide for related matters.	The Waste Management Act contains a number of key legal obligations, including requirements for waste management planning, waste collection and movement, the authorisation of waste facilities, measures to reduce the production of waste and/or promote its recovery.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities Environmental Objectives (FPM) Regulations 2009 (S.I 296 of 2009)	The purpose of these Regulations is to support the achievement of favourable conservation status for freshwater pearl mussels	Set environmental quality objectives for the habitats of the freshwater pearl mussel populations named in the First Schedule to these Regulations that are within the boundaries of a site notified in a candidate list of European sites, or designated as a Special Area of Conservation, under the European Communities (Natural Habitats) Regulations, 1997 (S.I. No. 94/1997).      Require the production of sub-basin management plans with programmes of measures to achieve these objectives.      Set out the duties of public authorities in respect of the sub-basin management plans and programmes of measure.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities Environmental Objectives (Groundwater) Regulations 2010 (S.I 9 of 2010), as amended (S.I. No. 366 of 2016)	To amend the European Communities Environmental Objectives (Groundwater) Regulations 2010 (S.I. No. 9 of 2010) to make further provision to implement Commission Directive 2014/80/EU of 20 June 2014 amending Annex II to Directive 2006/118/EC of the European Parliament and of the Council on the protection of groundwater against pollution and deterioration.	<ul> <li>The substances and threshold values set out in Schedule 5 to S.I. No. 9 of 2010 have been reviewed and amended where necessary, based on existing monitoring information and international guidelines on appropriate threshold values.</li> <li>Part A of Schedule 6 has been amended to include changes to the rules governing the determination of background levels for the purposes of establishing threshold values for groundwater pollutants and indicators of pollution.</li> <li>Part B of Schedule 6 has been amended to include nitrites and phosphorus (total) / phosphates among the minimum list of pollutants and their indicators which the Environmental Protection Agency (EPA) must consider when establishing threshold values.</li> <li>Part C of Schedule 6 amends the information to be provided to the Minister by the EPA with regard to the pollutants and their indicators for which threshold values have been established.</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2014 (S.I. No. 31 of 2014)	These Regulations, which give effect to Ireland's 3 <sup>rd</sup> Nitrates Action Programme, provide statutory support for good agricultural practice to protect waters against pollution from agricultural sources	The Regulations include measures such as:     Periods when land application of fertilisers is prohibited     Limits on the land application of fertilisers     Storage requirements for livestock manure; and     Monitoring of the effectiveness of the measures in terms of agricultural practice and impact on water quality.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Climate Action and Low Carbon Development Act 2015, as amended	An Act to provide for the approval of plans by the Government in relation to climate change for the purpose of pursuing the transition to a low carbon, climate resilient and environmentally sustainable economy.	When considering a plan or framework, for approval, the Government shall endeavour to achieve the national transition objective within the period to which the objective relates and shall, in endeavouring to achieve that objective, ensure that such objective is achieved by the implementation of measures that are cost effective and shall, for that purpose, have regard to:  The ultimate objective specified in Article 2 of the United Nations Framework Convention on Climate Change done at New York on 9 May 1992 and any mitigation commitment entered into by the European Union in response or otherwise in relation to that objective,  The policy of the Government on climate change,  Climate justice,  Any existing obligation of the State under the law of the European Union or any international agreement referred to in section 2; and  The most recent national greenhouse gas emissions inventory and projection of future greenhouse gas emissions, prepared by the Agency.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Climate Action Plan	The Climate Action Plan 2021 provides a detailed plan for taking decisive action to achieve a 51% reduction in overall greenhouse gas emissions by 2030 and setting Ireland on a path to reach netzero emissions by no later than 2050, as committed to in the Programme for Government and set out in the Climate Act 2021.	The Plan lists the actions needed to deliver on our climate targets and sets indicative ranges of emissions reductions for each sector of the economy. It will be updated annually, including in 2022, to ensure alignment with Ireland's legally binding economy-wide carbon budgets and sectoral ceilings.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
The Sustainable Development Goals National Implementation Plan (2018 – 2020)	National Implementation Plan 2018 - 2020 is in direct response to the 2030 Agenda for Sustainable Development and provides a whole-of-government approach to implement the 17 Sustainable Development Goals (SDGs).      The Plan provides a 'SDG Matrix' which identifies the responsible Government Departments for each of the 169 targets. It also includes a 'SDG Policy Map' indicating the relevant national policies for each of the targets.	The Plan identifies four strategic priorities to guide implementation:  Awareness: raise public awareness of the SDGs;  Participation: provide stakeholders opportunities to engage and contribute to follow-up and review processes, and further develop national implementation of the Goals;  Support: encourage and support efforts of communities and organisations to contribute towards meeting the SDGs, and foster public participation; and  Policy alignment: develop alignment of national policy with the SDGs and identify opportunities for policy coherence.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Infrastructure and Capital Investment Plan (2016-2021)	• €27 billion multi-annual Exchequer Capital Investment Plan, which is supported by a programme of capital investment in the wider State sector, and which over the period 2016 to	<ul> <li>This Capital Plan reflects the Government's commitment to supporting strong and sustainable economic growth and raising welfare and living standards for all.</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in

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	2021 will help to lay the foundations for continued growth in Ireland.	It includes allocations for new projects across a number of key areas and funding to ensure that the present stock of national infrastructure is refreshed and maintained.	combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Union (Birds and Natural Habitats) (Sea-Fisheries) Regulations 2013 (S.I. 290 of 2013)	These regulations have been drafted to implement the responsibilities of the Minister for Agriculture Food and the Marine in relation to sea fisheries in Natura 2000 sites, in accordance with the Habitats and Birds Directives as transposed by the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2011).	<ul> <li>Regulation 3 provides for the submission of a Fisheries Natura Plan in relation to planned fisheries;</li> <li>Regulation 4 provides for a screening of a Fisheries Natura Plan to determine whether or not an appropriate assessment is required;</li> <li>Regulation 5 provides for an appropriate assessment of a Fisheries Natura Plan and also provides for public and statutory consultation;</li> <li>Regulation 6 provides for the Minister to make a determination to adopt a Fisheries Natura Plan. The Minister may amend, withdraw or revoke a plan;</li> <li>Regulation 7 provides for publication of the adopted Fisheries Natura Plan;</li> <li>Regulation 8 provides for a Risk Assessment of unplanned fisheries and also provides for public and statutory consultation on the assessment;</li> <li>Regulation 9 provides for the issue of a Natura Declaration to prohibit, restrict including restricting by permit, control, etc. of sea fishing activities;</li> <li>Regulation 10 provides for Natura Permits to be issued where required by Natura Declarations; and</li> <li>Regulations 11 to 31 deal with functions of authorised officers and related matters, offences, etc.</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Ireland's National Renewable Energy Action Plan 2010 (Irish Government submission to the European Commission)	The National Renewable Energy Action Plan (NREAP) sets out the Government's strategic approach and concrete measures to deliver on Ireland's 16% target under Directive 2009/28/EC.	The NREAP sets out the Member State's national targets for the share of energy from renewable sources to be consumed in transport, electricity and heating and cooling in 2020, and demonstrates how the Member State will meet its overall national target established under the Directive.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Strategy for Renewable Energy (2012-2020)	The Government's overarching strategic objective is to make renewable energy an increasingly significant component of Ireland's energy supply by 2020, so that at a minimum it will achieve its legally binding 2020 target in the most costefficient manner for consumers.  Of critical importance is the role which the renewable energy sector plays in job creation and economic activity as part of the Government's action plan for jobs.	This document sets out five strategic goals, reflecting the key dimensions of the renewable energy challenge to 2020:  Increasing on and offshore wind, Building a sustainable bioenergy sector, Fostering R&D in renewables such as wave & tidal, Growing sustainable transport; and Building out robust and efficient networks.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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National Climate Mitigation Plan 2017	The Plan represents an initial step to set Ireland on a pathway to achieve the deep decarbonisation required in Ireland by mid-century in line with the Government's policy objectives.	The National Mitigation Plan focuses on the following issues:  Climate Action Policy Framework  Decarbonising Electricity Generation  Decarbonising the Built Environment  Decarbonising Transport  An Approach to Carbon Neutrality for Agriculture, Forest and Land Use Sectors	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Clean Air Strategy [in preparation]	framework necessary to identify and promote integrated measures across government policy that are required to reduce air pollution and promote cleaner air while delivering on wider national objectives.	<ul> <li>Having a National Strategy will provide a policy framework by which Ireland can develop the necessary policies and measures to comply with new and emerging EU legislation.</li> <li>The Strategy should also help tackle climate change.</li> <li>The Strategy will consider a wider range of national policies that are relevant to clean air policy such as transport, energy, home heating and agriculture.</li> <li>In any discussion relating to clean air policy, the issue of people's health is paramount and this will be a strong theme of the Strategy.</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EirGrid's Grid25 Strategy and associated Grid25 Implementation 2017-2022	EirGrid's mission is to develop, maintain and operate a safe, secure, reliable, economical and efficient transmission system for Ireland; "Our vision is of a grid developed to match future needs, so it can safely and reliably carry power all over the country to the major towns and cities and onwards to every home, farm and business where the electricity is consumed and so it can meet the needs of consumers and generators in a sustainable way."	Grid25, EirGrid's roadmap to uprate the electricity transmission grid by 2025, continues to be implemented so as to increase the capacity of the grid, to satisfy future demand, and to help Ireland meet its target of 40 per cent of electricity from renewable energy by 2020.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Strategy for the Future Development of National and Regional Greenways (2018)	<ul> <li>The objective of this Strategy is to assist in the strategic development of nationally and regionally significant Greenways in appropriate locations constructed to an appropriate standard in order to deliver a quality experience for all Greenways users.</li> <li>It also aims to increase the number and geographical spread of Greenways of scale and quality around the country over the next 10 years with a consequent significant increase in the number of people using Greenways as a visitor experience and as a recreational amenity.</li> </ul>	A Strategic Greenway network of national and regional routes, with a number of high capacity flagship routes that can be extended and/or link with local Greenways and other cycling and walking infrastructure;     Greenways of scale and appropriate standard that have significant potential to deliver an increase in activity tourism to Ireland and are regularly used by overseas visitors, domestic visitors and locals thereby contributing to a healthier society through increased physical activity;     Greenways that provide a substantially segregated off road experience linking places of interest, recreation and leisure in areas with beautiful scenery of different types with plenty to see and do; and     Greenways that provide opportunities for the development of local businesses and economies, and     Greenways that are developed with all relevant stakeholders in line with an agreed code of practice.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Water Resources Plan [in preparation]	<ul> <li>The NWRP is a plan on how to provide a safe, secure and reliable water supply to customers for the next 25 years, without causing adverse impact on the environment.</li> <li>The objective of the NWRP is to set out how we intend to maintain the supply and demand for drinking water over the</li> </ul>	The key objectives of the plan are to:  Identify areas where there are current and future potential water supply shortfalls, taking into account normal and extreme weather conditions  Assess the current and future water demand from homes, businesses, farms, and industry	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may

		the Draft Edenderry Local Area Flan 2023-2029	
Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	short, medium and long term whilst minimising the impact on the environment.	Consider the impacts of climate change on Ireland's water resources Develop a drought plan advising measures to be taken before and during drought events Develop a plan detailing how we deal with the material that is produced as a result of treating drinking water Identify, develop and assess options to help meet potential shortfalls in water supplies  Assess the water resources available at a national level including lakes, rivers and groundwater	arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Strategic Plan for Aquaculture Development (2014- 2020)	Vision: "Aquaculture in RC is economically, socially and ecologically sustainable, with a developed infrastructure, strong human potentials and an organized market. The consumption of aquaculture products is equal or above EU average, while the technological development of the sector is among the best in the EU."	General development and growth objectives of marine and freshwater aquaculture (2014 – 2020):  Strengthen the social, business and administrative environment for aquaculture development  Increase in the total production to 24,050 tonnes while adhering to the principles of economic, social and ecological sustainability  Improvement of the perception and increase in the national consumption of National products	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Construction 2020, A Strategy for a Renewed Construction Sector	Construction 2020 sets out a package of measures agreed by the Government and is aimed at stimulating activity in the building industry.  The Strategy aims both to increase the capacity of the sector to create and maintain jobs, and to deliver a sustainable sector, operating at an appropriate level. It seeks to learn the lessons of the past and to ensure that the right structures and mechanisms are in place so that they are not repeated.	<ul> <li>This Strategy therefore addresses issues including:         <ul> <li>A strategic approach to the provision of housing, based on real and measured needs, with mechanisms in place to detect and act when things are going wrong;</li> <li>Continuing improvement of the planning process, striking the right balance between current and future requirements;</li> </ul> </li> <li>The availability of financing for viable and worthwhile projects;</li> <li>Access to mortgage finance on reasonable and sustainable terms;</li> <li>Ensuring we have the tools we need to monitor and regulate the sector in a way that underpins public confidence and worker safety;</li> <li>Ensuring a fit for purpose sector supported by a highly skilled workforce achieving high quality and standards; and</li> <li>Ensuring opportunities are provided to unemployed former construction workers to contribute to the recovery of the sector.</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Sustainable Development: A Strategy for Ireland (1997)	and society in Ireland can develop to their full potential within a well-protected environment, without compromising the quality of that environment, and with responsibility towards present and future generations and the wider international community.	The Strategy addresses all areas of Government policy, and of economic and societal activity, which impact on the environment. It seeks to reorientate policies as necessary to ensure that the strong growth Ireland enjoys and seeks to maintain will be environmentally sustainable.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Landscape Strategy for Ireland 2015-2025 and National Landscape Character Assessment (pending preparation)	The National Landscape Strategy will be used to ensure compliance with the European Landscape Convention and to establish principles for protecting and enhancing the landscape while positively managing its change. It will provide a high-level policy framework to achieve balance between the protection, management and planning of the landscape by way of supporting actions.  Landscape Strategy Vision: "Our landscape reflects and embodies our cultural values and our shared natural heritage."	The objectives of the National Landscape Strategy are to: Implement the European Landscape Convention by integrating landscape into the approach to sustainable development; Establish and embed a public process of gathering, sharing and interpreting scientific, technical and cultural information in order to carry out evidence-based identification and description of the character, resources and processes of the landscape; Provide a policy framework, which will put in place measures at national, sectoral - including agriculture, tourism, energy, transport and marine -	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users

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Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective  and contributes to the well-being of our society, environment and economy. We have an obligation to ourselves and to future generations to promote its sustainable protection, management and planning."	and local level, together with civil society, to protect, manage and properly plan through high quality design for the sustainable stewardship of the landscape;     Ensure that we take advantage of opportunities to implement policies relating to landscape use that are complementary and mutually reinforcing and that conflicting policy objectives are avoided in as far as possible.	and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Hazardous Waste Management Plan (EPA) 2014- 2020	This Plan sets out the priorities to be pursued over the next six years and beyond to improve the management of hazardous waste, taking into account the progress made since the previous plan and the waste policy and legislative changes that have occurred since the previous plan was published. Section 26 of the Waste Management Act 1996 as amended, sets out the overarching objectives for the National Hazardous Waste Management Plan. In this context, the following objectives are included as priorities for the revised Plan period:  To prevent and reduce the generation of hazardous waste by industry and society generally;  To maximise the collection of hazardous waste with a view to reducing the environmental and health impacts of any unregulated waste;  To strive for increased self-sufficiency in the management of hazardous waste and to minimise hazardous waste export;  To minimise the environmental, health, social and economic impacts of hazardous waste generation and management.	The revised Plan makes 27 recommendations under the following topics:  Prevention Collection Self-sufficiency Regulation Legacy issues North-south cooperation Guidance and awareness Implementation	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Ministerial Guidelines such as Sustainable Rural Housing Guidelines and Flood Risk Management Guidelines	The Department produces a range of guidelines designed to help planning authorities, An Bord Pleanála, developers and the general public and cover a wide range of issues amongst others, architectural heritage, child care facilities, landscape, quarries and residential density.	The Minister issues statutory guidelines under Section 28 of the Act which planning authorities and An Bord Pleanála are obliged to have regard to in the performance of their planning functions.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
HSE Healthy Ireland Framework for Improved Health and Wellbeing 2013-2025	The vision is: "A Healthy Ireland, where everyone can enjoy physical and mental health and wellbeing to their full potential, where wellbeing is valued and supported at every level of society and is everyone's responsibility."	<ul> <li>These four goals are interlinked, interdependent and mutually supportive:</li> <li>Goal 1: Increase the proportion of people who are healthy at all stages of life</li> <li>Goal 2: Reduce health inequalities</li> <li>Goal 3: Protect the public from threats to health and wellbeing</li> <li>Goal 4: Create an environment where every individual and sector of society can play their part in achieving a healthy Ireland</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Our Sustainable Future: A framework for Sustainable Development for Ireland 2012	A medium to long term framework for advancing sustainable development and the green economy in Ireland. It identifies spatial planning as a key challenge for sustainable development and sets a series of measures to address these challenges.	Sets out the challenges facing us and how we might address them in making sure that quality of life and general wellbeing can be improved and sustained in the decades to come.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Smarter Travel – A Sustainable Transport Future – A New Transport Policy for Ireland 2009 – 2020 (2009)	Outlines a policy for how a sustainable travel and transport system can be achieved.     Sets out five key goals:	Others lower level aims include:  reduce distance travelled by private car and encourage smarter travel, including focusing population growth in areas of employment and to encourage people to live in close proximity to places of employment  ensuring that alternatives to the car are more widely available, mainly through a radically improved public transport service and through investment in cycling and walking  improving the fuel efficiency of motorised transport through improved fleet structure, energy efficient driving and alternative technologies  strengthening institutional arrangements to deliver the targets	align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.  Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Investing in our Future: A Strategic Framework for Investment in Land Transport (SFILT) – Department of Transport, Tourism and Sport	SFILT sets out a set of priorities to guide the allocation of the State's investment to best develop and manage Ireland's land transport network over the coming decades.	The three priorities stated in SFILT are: Priority 1: Achieve steady state maintenance (meaning that the maintenance and renewal of the existing transport system is at a sufficient level to maintain the system in an adequate condition); Priority 2: Address urban congestion; and Priority 3: Maximise the value of the road network.  In delivering on the steady state maintenance objective set out in SFILT, the Plan includes for: Planned replacement programme for the bus fleet operated under Public Service Obligation ("PSO") contracts; Tram refurbishment and asset renewal in the case of light rail; and To the extent within the Authority remit, support for the operation of the existing rail network within the GDA.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Delivering a Sustainable Energy Future for Ireland – The Energy Policy Framework 2007 – 2020 (2007)	White paper setting out a framework for delivering a sustainable energy future in Ireland.  Outlines strategic Goals for:  Security of Supply Sustainability of Energy Competitiveness of Energy Supply	The underpinning Strategic Goals are:  Ensuring that electricity supply consistently meets demand Ensuring the physical security and reliability of gas supplies to Ireland Enhancing the diversity of fuels used for power generation Delivering electricity and gas to homes and businesses over efficient, reliable and secure networks Creating a stable attractive environment for hydrocarbon exploration and production Being prepared for energy supply disruptions	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Adaptation Framework (NAF) 2018 and associated regional, local and sectoral adaptation plans	NAF specifies the national strategy for the application of adaptation measures in different sectors and by local authorities in their administrative areas in order to reduce the vulnerability of the State to the negative effects of climate change and to avail of any positive effects that may occur	<ul> <li>Adaptation under this Framework should seek to minimise costs and maximise the opportunities arising from climate change.</li> <li>Adaptation actions range from building adaptive capacity (e.g. increasing awareness, sharing information and targeted training) through to policy and finance-based actions.</li> <li>Adaptation actions must be risk based, informed by existing vulnerabilities of our society and systems and an understanding of projected climate change.</li> <li>Adaptation actions taken to increase climate resilience must also consider impacts on other sectors and levels of governance</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
			regulatory framework for environmental protection and management.
National Renewable Energy Action Plan (2010)	Sets out the Member State's national targets for the share of energy from renewable sources to be consumed in transport, electricity and heating and cooling in 2020, and demonstrates how the Member State will meet its overall national target established under the Directive.	Including Ireland's 16% target of gross final consumption to come from renewables by 2020.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Energy Efficiency Action Plan for Ireland (2009 – 2020)	This is the second National Energy Efficiency Action Plan for Ireland.	The Plan reviews the original 90 actions outlined in the first Plan and updates/renews/removes them as appropriate.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Wildlife Act of 1976 Wildlife (Amendment) Act, 2000	The act provides protection and conservation of wild flora and fauna.	Provides protection for certain species, their habitats and important ecosystems Give statutory protection to NHAs Enhances wildlife species and their habitats Includes more species for protection	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Actions for Biodiversity (2017- 2021) Ireland's National Biodiversity Plan	Sets out strategic objectives, targets and actions to conserve and restore Ireland's biodiversity and to prevent and reduce the loss of biodiversity in Ireland and globally.	<ul> <li>To mainstream biodiversity in the decision-making process across all sectors.</li> <li>To substantially strengthen the knowledge base for conservation, management and sustainable use of biodiversity.</li> <li>To increase awareness and appreciation of biodiversity and ecosystems services.</li> <li>To conserve and restore biodiversity and ecosystem services in the wider countryside.</li> <li>To conserve and restore biodiversity and ecosystem services in the marine environment.</li> <li>To expand and improve on the management of protected areas and legally protected species.</li> <li>To substantially strengthen the effectiveness of international governance for biodiversity and ecosystem services.</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Broadband Plan (2012)	Sets out the strategy to deliver high speed broadband throughout Ireland.	The Plan sets out:     A clear statement of Government policy on the delivery of High-Speed	Where new land use developments or activities occur as a result of this legislation,

Logislation Dlan ata		Summary of lower level phicatives, actions at	Delevence to the Dis-
Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.  Broadband.	Relevance to the Plan plan, programme, etc., individually or in
		<ul> <li>Specific targets for the delivery and rollout of high-speed broadband and the speeds to be delivered.</li> <li>The strategy and interventions that will underpin the successful implementation of these targets.</li> <li>A series of specific complementary measures to promote implementation of Government policy in this area.</li> </ul>	combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities (Water Policy) Regulations of 2003 (SI 722 of 2003)  European Communities (Water Policy) Regulations of 2003 (SI 350 of 2014)  European Communities Environmental Objectives (Surface waters) Regulations of 2009 (SI 272 of 2009)	<ul> <li>Transpose the Water Framework Directive into legislation.</li> <li>Outlines the general duty of public authorities in relation to water.</li> <li>Identifies the competent authorities in charge of water policy (amended to Irish Water in 2013) and gives EPA and the CER the authority to regulate and supervise their actions.</li> </ul>	<ul> <li>Implements River basin districts and characterisation of RBDs and River Basin Management Plans.</li> <li>Requires the public to be informed and consulted on the Plan and for progress reports to be published on RBDs.</li> <li>Implements a Register of protected areas, Classification systems and Monitoring programmes for water bodies.</li> <li>Allows the competent authority to recover the cost of damage/destruction of status of water body.</li> <li>Outlines environmental objectives and programme of measures and environmental quality standards for priority substances.</li> <li>Outlines criteria for assessment of groundwater.</li> <li>Outlines environmental objectives to be achieved for surface water bodies.</li> <li>Outlines surface water quality standards.</li> <li>Establishes threshold values for the classification and protection of surface waters against pollution and deterioration in quality.</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities Environmental Objectives (Groundwater) Regulations of 2010 (SI 9 of 2010)	Transpose the requirements of the Groundwater Directive 2006/118/EC into Irish Legislation.	Outlines environmental objectives to be achieved for groundwater bodies of groundwater against pollution and deterioration in quality.     Sets groundwater quality standards.     Outlines threshold values for the classification and protection of groundwater.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Water Pollution Acts 1977 to 1990	The Water Pollution Acts allow Local Authorities the authority regulate and supervise actions relating to water in their division.	<ul> <li>The Water Pollution Acts enable local authorities to:</li> <li>Prosecute for water pollution offences.</li> <li>Attach appropriate pollution control conditions in the licensing of effluent discharges from industry, etc., made to waters.</li> <li>Issue notices ("section 12 notices") to farmers, etc., specifying measures to be taken within a prescribed period to prevent water pollution.</li> <li>issue notices requiring a person to cease the pollution of waters and requiring the mitigation or remedying of any effects of the pollution in the manner and within the period specified in such notices;</li> <li>Seek court orders, including High Court injunctions, to prevent, terminate, mitigate or remedy pollution/its effects.</li> <li>Prepare water quality management plans for any waters in or adjoining their functional areas.</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Water Services Act 2007  Water Services (Amendment) Act 2012	<ul> <li>Provides the water services infrastructure.</li> <li>Outlines the responsibilities involved in delivering and managing water services.</li> <li>Identifies the authority in charge of provision of water and waste water supply.</li> </ul>	Key strategic objectives include:     Ensuring Irish Water delivers infrastructural projects that meet key public health, environmental and economic objectives in the water services sector.     Ensuring the provision of adequate water and sewerage services in the	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Water Services Act (No. 2) 2013	Irish Water was given the responsibility of the provision of water and waste water services in the amendment act during 2013, therefore these services are no longer the responsibility of the 34 Local Authorities in Ireland.	gateways and hubs listed in the National Spatial Strategy, and in other locations where services need to be enhanced.  Ensuring good quality drinking water is available to all consumers of public and group water supplies, in compliance with national and EU drinking water standards  Ensuring the provision of the remaining infrastructure needed to provide secondary waste water treatment, for compliance with the requirements of the EU Urban Waste water Treatment Directive.  Promoting water conservation through Irish Water's Capital Investment Plan, the Rural Water Programme and other measures.  Monitoring the on-going implementation of septic tanks inspection regime and the National Inspection Plan for Domestic Waste Water Treatment Systems.  Ensuring a fair funding model to deliver water services.  Overseeing the establishment of an economic regulation function under the CER.	arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Irish Water's Water Services Strategic Plan 2015 and associated Proposed Capital Investment Plan (2014-2016)	This Water Services Strategic Plan sets out strategic objectives for the delivery of water services over the next 25 years up to 2040. It details current and future challenges which affect the provision of water services and identifies the priorities to be tackled in the short and medium term.	Six strategic objectives as follows:  Meet Customer Expectations.  Ensure a Safe and Reliable Water Supply.  Provide Effective Management of Waste water.  Protect and Enhance the Environment.  Support Social and Economic Growth.  Invest in the Future.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards — in combination with other users and bodies and their plans etc. — the achievement of the objectives of the regulatory framework for environmental protection and management.
Raised Bog SAC Management Plan and Review of Raised Bog Natural Heritage Areas	Aims to meet nature conservation obligations while having regard to national and local economic, social and cultural needs	<ul> <li>Ensure that the implications of management choices for water levels, quantity and quality are fully explored, understood and factored into policy making and land use planning.</li> <li>Review the current raised bog NHA network in terms of its contribution to the national conservation objective for raised bog habitats and determine the most suitable sites to replace the losses of active raised bog habitat and high bog areas within the SAC network and to enhance the national network of NHAs.</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Food Harvest 2020	Food Harvest 2020 is a roadmap for the Irish food industry, as it seeks to innovate and expand in response to increased global demand for quality foods. It sets out a vision for the potential growth in agricultural output after the removal of milk quotas.	Seeks for the improvement of all agricultural sectors at all levels in terms of sustainability, environmental consideration and marketing development.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Agri-vision 2015 Action Plan	Outlines the vision for agricultural industry to improve competitiveness and response to market demand while respecting and enhancing the environment	not applicable	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
			combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Rural Environmental Protection Scheme (REPS)  Agri-Environmental Options Scheme (AEOS)  Green, Low-Carbon, Agri- environment Scheme (GLAS)	Agri-environmental funding schemes aimed at rural development for the environmental enhancement and protection.     GLAS is the new replacement for REPS and AEOS which are both expiring.	<ul> <li>Establish best practice farming methods and production methods in order to protect landscapes and maximise conservation.</li> <li>Protect biodiversity, endangered species of flora and fauna and wildlife habitats.</li> <li>Ensure food is produced with the highest regard to the environment.</li> <li>Implement nutrient management plans and grassland management plans.</li> <li>Protect and maintain water bodies, wetlands and cultural heritage.</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Rural Development Programme	The National Rural Development Programme, prepared by the Department of Agriculture, Fisheries and Food, sets out a national programme based on the EU framework for rural development and prioritises improving the competitiveness of agriculture, improving the environment and improving the quality of life in rural areas	At a more detailed level, the programme also:  Supports structural change at farm level including training young farmers and encouraging early retirement, support for restructuring, development and innovation;  Aims to improve the environment, biodiversity and the amenity value of the countryside by support for land management through funds such as Natura 2000 payments etc.; and  Aims to improve quality of life in rural areas and encouraging diversification of economic activity through the implementation of local development strategies such as non-agricultural activities	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Forestry Programme (2014-2020)	Represents Ireland's proposals for 100% State aid funding for a new Forestry Programme for the period 2014 – 2020.	Measures include the following:      Afforestation and Creation of Woodland     NeighbourWood Scheme     Forest Roads     Reconstitution Scheme     Woodland Improvement Scheme     Native Woodland Conservation Scheme     Knowledge Transfer and Information Actions     Producer Groups     Innovative Forest Technology     Forest Genetic Reproductive Material     Forest Management Plans	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
River Basin Management Plan	River Basin Management Plans set out the measures planned to maintain and improve the status of waters.	Aim to protect and enhance all water bodies in the RBD and meet the environmental objectives outlined in Article 4 of the Water Framework Directive.     Identify and manages water bodies in the RBD.     Establish a programme of measures for monitoring and improving water quality in the RBD.     Involve the public through consultations.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users

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			and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Peatlands Strategy (2015-2025)	This Strategy aims to provide a long-term framework within which all of the peatlands within the State can be managed responsibly in order to optimise their social, environmental and economic contribution to the well-being of this and future generations.	To give direction to Ireland's approach to peatland management.     To apply to all peatlands, including peat soils.     To ensure that the relevant State authorities and state-owned companies that influence such decisions contribute to meeting cross-cutting objectives and obligations in their policies and actions.     To ensure that Ireland's peatlands are sustainably managed so that their benefits can be enjoyed responsible.     To inform appropriate regulatory systems to facilitate good decision making in support of responsible use.     To inform the provision of appropriate incentives, financial supports and disincentives where required.     To provide a framework for determining and ensuring the most appropriate future use of cutover and cutaway bogs.  To ensure that specific actions necessary for the achievement of its objectives are clearly identified and delivered by those involved in or responsible for peatlands management or for decisions affecting their management.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Flood Risk Management Plans arising from National Catchment Flood Risk Assessment and Management Programme	The national Catchment Flood Risk Assessment and Management (CFRAM) programme commenced in Ireland in 2011 and is being overseen by the Office of Public Works. The CFRAM Programme is intended to deliver on core components of the National Flood Policy, adopted in 2004, and on the requirements of the EU Floods Directive.	CFRAM Studies have been undertaken for all River Basin Districts. The studies are focusing on areas known to have experienced flooding in the past and areas that may be subject to flooding in the future either due to development pressures or climate change. Flood Risk and Hazard mapping, including Flood Extent Mapping, was finalised in 2017. The final outputs from the studies are the CFRAM Plans, finalised in 2018. The Plans define the current and future flood risk in the River Basin Districts and set out how this risk can be managed.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Draft National Bioenergy Plan 2014 - 2020	The Draft Bioenergy Plan sets out a vision as follows:     Bioenergy resources contributing to economic development and sustainable growth, generating jobs for citizens, supported by coherent policy, planning and regulation, and managed in an integrated manner.	<ul> <li>Three high level goals, of equal importance, based on the concept of sustainable development are identified:</li> <li>To harness the market opportunities presented by bioenergy in order to achieve economic development, growth and jobs.</li> <li>To increase awareness of the value, opportunities and societal benefits of developing bioenergy.</li> <li>To ensure that bioenergy developments do not adversely impact the environment and its living and non-living resources.</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Draft Renewable Electricity Policy and Development Framework (DCCAE) 2016	Goal: To optimise the opportunities in Ireland for renewable electricity development on land at significant scale, to serve both the All Island Single Electricity Market and any future regional market within the European Union, in accordance with European and Irish law, including Directive 2009/28/EC: On the promotion of the use of energy from renewable resources.	Objective: To develop a Policy and Development Framework for renewable electricity generation on land to serve both the All Island Single Electricity Market and any future regional market within the European Union, with particular focus on large scale projects for indigenous renewable electricity generation. This will, inter alia, provide guidance for planning authorities and An Bord Pleanála.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
National Alternative Fuels Infrastructure for the Transport Sector (DTTAS) 2017- 2030		Targets for alternative fuel infrastructure include the following:	achievement of the objectives of the regulatory framework for environmental protection and management.  Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the
Food Wise 2025 (DAFM)	Food Wise 2025 sets out a ten-year plan for the agri-food sector. It underlines the sector's unique and special position within the Irish economy, and it illustrates the potential which exists for this sector to grow even further.	Food Wise 2025 identifies ambitious and challenging growth projections for the industry over the next ten years including:  ■ 85% increase in exports to €19 billion.  ■ 70% increase in value added to €13 billion.  ■ 60% increase in primary production to €10 billion.  ■ The creation of 23,000 additional jobs all along the supply chain from producer level to high-end value-added product development.	achievement of the objectives of the regulatory framework for environmental protection and management.  Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users
National Cycle Network Scoping Study 2010	Outlines objectives and actions aimed at developing a strong cycle network in Ireland     Sets out 19 specific objectives, and details the 109 actions, aimed at ensuring that a cycling culture is developed	Sets a target where 10% of all journeys will be made by bike by 2020     Proposes the planning, infrastructure, communication, education and stakeholder participations measures required to implement the initiative	and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.  Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental
National Policy Framework for Alternative Fuels Infrastructure for Transport in Ireland 2017 to 2030	This National Policy Framework on Alternative Fuels Infrastructure for Transport represents the first step in communicating our longer-term national vision for decarbonising transport by 2050, the cornerstone of which is our ambition that by 2030 all new cars and vans sold in Ireland will be zero-emissions capable.  By 2030 it is envisaged that the movement in Ireland to electrically-fuelled cars and commuter rail will be well underway, with natural gas and biofuels developing as major alternatives in the freight and bus sectors.	This policy set out to achieve five key goals in transport:  Reduce overall travel demand Maximise the efficiency of the transport network Reduce reliance on fossil fuels Reduce transport emissions Improve accessibility to transport  These goals remain the cornerstone of transport policy and are fully aligned to the objectives of this National Policy Framework.	protection and management.  Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Logislation Dlam ata		Summary of layer level chiestings, actions at	Delevenes to the Dian
Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Tourism Action Plan 2019-2021	The Tourism Action Plan 2019-2021 sets out actions that the	The Plan contains 27 actions focusing on the following areas:	Where new land use developments or
	Tourism Leadership Group has identified as priorities to be	Policy Context	activities occur as a result of this legislation,
	progressed until 2021 in order to maintain sustainable growth in	Marketing Ireland as a Visitor Destination	plan, programme, etc., individually or in
	overseas tourism revenue and employment. Each action involves	Enhancing the Visitor Experience	combination with others, potential in-
	specific tourism stakeholders, both in the public and private	Research in the Irish Tourism Sector	combination effects (see Section 8.2) may
	sectors, all of whom we expect to proactively work towards the	Supporting Local Communities in Tourism	arise. Implementation of the Plan needs to
	completion of actions within the specified timeframe.	Wider Government Policy	comply with all environmental legislation and
		International Context	align with and cumulatively contribute
		Co-ordination Structures	towards - in combination with other users
			and bodies and their plans etc the
			achievement of the objectives of the
			regulatory framework for environmental
			protection and management.
Tourism Policy Statement:	The main goal of this policy statement is to have a vibrant,	The Tourism Policy Statement sets three headline targets to be	Where new land use developments or
People, Place and Policy -	attractive tourism sector that makes a significant contribution to	achieved by 2025:	activities occur as a result of this legislation,
Growing Tourism to 2025	employment across the country; is economically, socially and	<ul> <li>Overseas tourism revenue of €5 billion per year</li> </ul>	plan, programme, etc., individually or in
	environmentally sustainable; helps promote a positive image of	<ul> <li>net of inflation excluding carrier receipts;</li> </ul>	combination with others, potential in-
	Ireland overseas, and is a sector in which people want to work.	<ul> <li>250,000 people employed in tourism; and</li> </ul>	combination effects (see Section 8.2) may
		10 million overseas visitors to Ireland per year.	arise. Implementation of the Plan needs to
			comply with all environmental legislation and
			align with and cumulatively contribute
			towards - in combination with other users
			and bodies and their plans etc the
			achievement of the objectives of the
			regulatory framework for environmental
			protection and management.
Draft Renewable Electricity	Goal: To optimise the opportunities in Ireland for renewable	Objective: To develop a Policy and Development Framework for renewable	Where new land use developments or
Policy and Development	electricity development on land at significant scale, to serve both	electricity generation on land to serve both the All Island Single Electricity	activities occur as a result of this legislation,
Framework (DCCAE)	the All Island Single Electricity Market and any future regional	Market and any future regional market within the European Union, with	plan, programme, etc., individually or in
	market within the European Union, in accordance with European	particular focus on large scale projects for indigenous renewable electricity	combination with others, potential in-
	and Irish law, including Directive 2009/28/EC: On the promotion of	generation. This will, inter alia, provide guidance for planning authorities and	combination effects (see Section 8.2) may
	the use of energy from renewable resources.	An Bord Pleanála.	arise. Implementation of the Plan needs to
			comply with all environmental legislation and
		Methodology: Development of the Policy and Development Framework is to be	align with and cumulatively contribute
		informed by the carrying out of an SEA, including widespread consultation with	towards - in combination with other users
		stakeholders and public, and with AA under the Habitats Directive.	and bodies and their plans etc. – the
			achievement of the objectives of the
			regulatory framework for environmental
			protection and management.
National Alternative Fuels	This Framework sets targets to achieve an appropriate level of	Targets for alternative fuel infrastructure include the following:	Where new land use developments or
Infrastructure for the Transport	alternative fuels infrastructure for transport, which is relative to	AFV forecasts	activities occur as a result of this legislation,
Sector (DTTAS) 2017- 2030	national policy and Irish market needs. Non-infrastructure-based	Electricity targets	plan, programme, etc., individually or in
2000	incentives to support the use of the infrastructure and the uptake	Natural gas (CNG, LNG) targets	combination with others, potential in-
	of alternative fuels are also included within the scope of the	Hydrogen targets	combination effects (see Section 8.2) may
	Framework.	Biofuels targets	arise. Implementation of the Plan needs to
		LPG targets	comply with all environmental legislation and
		Synthetic and paraffinic fuels targets	align with and cumulatively contribute
		Symmotic and paraminic racio targeto	towards – in combination with other users
			and bodies and their plans etc. – the
			achievement of the objectives of the
			regulatory framework for environmental
			protection and management.
Regional/ County/Local Level			procession and management.
Eastern and Midlands Regional	The Regional Spatial and Economic Strategy provides a long-term	The Eastern and Midlands Regional Economic and Spatial Strategy includes	Where new land use developments or
Economic and Spatial Strategy,	strategic planning and economic framework for the Eastern and	provisions for its 12 constituent local authorities: Fingal County Council; Dublin	activities occur as a result of this legislation,
2019-2031	Midlands Region in order to support the implementation of the	City Council; South Dublin County Council; Dún Laoghaire-Rathdown County	plan, programme, etc., individually or in
	National Planning Framework.	Council; Louth County Council; Kildare County Council; Meath County Council;	combination with others, potential in-
	1	1 , County county	1

Logislation Dlam ata		Summary of lower level objectives, actions etc.	Relevance to the Plan
Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective		
		Wicklow County Council; Longford County Council; Laois County Council; Offaly County Council; and Westmeath County Council.	combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Integrated Implementation Plan 2019-2024	The Transport Strategy for the Greater Dublin Area 2016-2035, which established an overall framework for transport investment over the next two decades and was subject to full SEA and Stage 2 AA, is a key policy shaping the six-year Integrated Infrastructure Plan. The priorities in the Integrated Infrastructure Plan align with the objectives and priorities set out in the Transport Strategy, focused on improving public and sustainable transport.	The Implementation Plan identifies investment proposals for a number of areas including:  Bus;  Light Rail;  Heavy Rai;  Integration Measures and Sustainable Transport Investment;  Integrated Service Plan; and  Integration and Accessibility.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
NPWS Conservation Plans and/or Conservation Objectives for SACs and SPAs	Management planning for nature conservation sites has a number of aims. These include:  To identify and evaluate the features of interest for a site  To set clear objectives for the conservation of the features of interest  To describe the site and its management  To identify issues (both positive and negative) that might influence the site  To set out appropriate strategies/management actions to achieve the objectives	<ul> <li>Conservation objectives for SACs and SPAs (i.e. sites within the Natura 2000 network) have to be set for the habitats and species for which the sites are selected.</li> <li>These objectives are used when carrying out appropriate assessments for plans and projects that might impact on these sites.</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Groundwater Protection Schemes	A Groundwater Protection Scheme provides guidelines for the planning and licensing authorities in carrying out their functions, and a framework to assist in decision-making on the location, nature and control of developments and activities in order to protect groundwater.	A Groundwater Protection Scheme aims to maintain the quantity and quality of groundwater, and in some cases improve it, by applying a risk assessment-based approach to groundwater protection and sustainable development.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Local Economic and Community Plans (LECPs), including the Offaly LECP 2016-2022	The overarching vision for each LECP is: "to promote the well-being and quality of life of citizens and communities	The purpose of the LECP, as provided for in the Local Government Reform Act 2014, is to set out, for a six-year period, the objectives and actions needed to promote and support the economic development and the local and community development of the relevant local authority area, both by itself directly and in partnership with other economic and community development stakeholders.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	the Draft Edenderry Local Area Plan 2023-2029  Summary of lower level objectives, actions etc.	Relevance to the Plan
			achievement of the objectives of the regulatory framework for environmental protection and management.
Land Use Plans including those in force and emerging in County Offaly (including the overarching Offaly County Development Plan 2021-2027), and those in force in other adjoining planning authorities (including development plans for Counties Meath, Westmeath, Roscommon, Galway, Tipperary, Laois and Kildare and local plans for settlements)	Outline planning objectives for land use development (including transport and tourism objectives).     Strategic framework for planning and sustainable development including those set out in National Planning Framework and Regional Economic and Spatial Strategies.     Set out the policies and proposals to guide development in the specific Local Authority area.	<ul> <li>Identify future infrastructure, development and zoning required.</li> <li>Protect and enhances amenities and environment.</li> <li>Guide planning authority in assessing proposals.</li> <li>Aim to guide development in the area and the amount of nature of the planned development.</li> <li>Aim to promote sustainable development.</li> <li>Provide for economic development and protect natural environmental, heritage.</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Offaly Tourism Statement of Strategy 2017-2022	The Vision: to maximise sustainable tourism product development opportunities and to develop Offaly as a quality tourism destination steeped in treasures of culture and heritage and renowned for open spaces and welcoming people.	This Vision will be delivered through, inter alia, measures relating to product development and marketing and promotion.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Offaly Heritage Plan 2017-2021	Aim to highlight the importance of heritage at a strategic level. Aim to protect, conserve, enhance and restore biodiversity and ecosystem services across all spectrums	Manage and promote heritage as well as increase awareness. Aim to conserve and protect heritage. Outline the status of biodiversity and identifies species of importance. Outline objectives and targets to be met to maintain and improve biodiversity. Aims to increase awareness.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Eastern & Midlands Regional Waste Management Plan 2015- 2021	These plans give effect to national and EU waste policy, and address waste prevention and management (including generation, collection and treatment) over the period 2015-2021.	To manage wastes in a safe and compliant manner, a clear strategy, policies and actions are required.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Offaly Noise Action Plan 2018-	Noise Action Plans are prepared in accordance with the	The main purpose of Noise Action Plans is to:	Where new land use developments or
2023	requirements of the Environmental Noise Regulations 2006,	Inform and consult the public about noise exposure, its effects and the	activities occur as a result of this legislation,
	Statutory Instrument 140 of 2006. These Regulations give effect to	measures which may be considered to address noise problems Address	plan, programme, etc., individually or in
	the EU Directive 2002/49/EC relating to the assessment and	strategic noise issues by requiring competent authorities to draw up	combination with others, potential in-
	management of environmental noise. This Directive sets out a	action plans to manage noise issues and their effects Reduce noise,	combination effects (see Section 8.2) may
	process for managing environmental noise in a consistent manner across the EU and the Noise Regulations set out the approach to	where possible, and maintain the environmental acoustic quality where it is good	arise. Implementation of the Plan needs to comply with all environmental legislation and
	meeting the requirements of the Directive in Ireland.	is good	align with and cumulatively contribute
	meeting the requirements of the birective in notation.		towards – in combination with other users
			and bodies and their plans etc the
			achievement of the objectives of the
			regulatory framework for environmental
			protection and management.
Offaly Climate Change	Respond to the impact that climate change is having, and will	These Plans include actions for:	Where new land use developments or
Adaptation Strategy 2019-2024	continue to have. Attempt to climate change adaptation and mitigation.	Energy and Buildings, Transport, Flood Resilience, Nature-Based Solutions and Resource Management	activities occur as a result of this legislation, plan, programme, etc., individually or in
	mitigation.	Solutions and Resource Management	combination with others, potential in-
			combination effects (see Section 8.2) may
			arise. Implementation of the Plan needs to
			comply with all environmental legislation and
			align with and cumulatively contribute
			towards – in combination with other users
			and bodies and their plans etc. – the
			achievement of the objectives of the regulatory framework for environmental
			protection and management.
Fáilte Ireland Tourism plans,	Fáilte Ireland's work includes preparing various plans and	Some of Fáilte Ireland's plans and strategies include various projects relating	Where new land use developments or
strategies, including those	strategies for Ireland's Hidden Heartlands, the Wild Atlantic Way,	to land use and infrastructural development, including those relating to	activities occur as a result of this legislation,
relating to the Ireland's Ancient	Ireland's Ancient East and other brands and initiatives. These plans	development of land or on land and the carrying out of land use activities.	plan, programme, etc., individually or in
East and Hidden Heartlands	are subject to their own environmental assessment processes and	Many of these projects exist already while some are not currently in existence.	combination with others, potential in-
brands	any project arising is required to be consistent with and conform with the provisions of all adopted/approved Statutory Policies,	The Statutory Policies, Strategies, Plans and Programmes that provide for different projects undergo a variety of environmental assessments. These	combination effects (see Section 8.2) may arise. Implementation of the Plan needs to
	Strategies, Plans and Programmes, including provisions for the	assessments ensure that environmental effects are considered, including:	comply with all environmental legislation and
	protection and management of the environment.	those arising from new and intensified uses and activities; and those arising	align with and cumulatively contribute
		from various sectors such as tourism.	towards - in combination with other users
			and bodies and their plans etc the
			achievement of the objectives of the
			regulatory framework for environmental
Various existing, planned and	These projects have been provided for by higher-level plans and	These projects will contribute towards the development of the area to which	protection and management.  Where new land use developments or
emerging projects provided for	programmes.	the Plan relates and/or wider area and will contribute towards environmental	activities occur as a result of this legislation,
by the above plans and	programmos.	protection and management.	plan, programme, etc., individually or in
programmes		,	combination with others, potential in-
			combination effects (see Section 8.2) may
			arise. Implementation of the Plan needs to
			comply with all environmental legislation and
			align with and cumulatively contribute
			towards – in combination with other users and bodies and their plans etc. – the
			achievement of the objectives of the
			regulatory framework for environmental
			protection and management.