



Comhairle Contae Thiobraid Árann  
Tipperary County Council

# Draft Roscrea Local Area Plan 2023 – 2029

## Appendix 5: STRATEGIC ENVIRONMENTAL ASSESSMENT ENVIRONMENTAL REPORT AND NON-TECHNICAL SUMMARY

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## List of Abbreviations

<b>AA</b>	Appropriate Assessment
<b>ACA</b>	Architectural Conservation Area
<b>CAFE</b>	Cleaner Air for Europe
<b>CFRAM</b>	Catchment Flood Risk Assessment and Management
<b>CORINE</b>	Co-Ordinated Information on the Environment
<b>CSO</b>	Central Statistics Office
<b>DAFM</b>	Department of Agriculture, Food and Marine
<b>DCCA</b>	Department of Communication, Climate Action and Environment
<b>DCHG</b>	Department of Culture, Heritage and the Gaeltacht
<b>DECC</b>	Department of Environment, Climate and Communications
<b>DEHLG</b>	Department of the Environment, Heritage and Local Government
<b>DHLGH</b>	Department of Housing, Local Government and Heritage
<b>EIA</b>	Environmental Impact Assessment
<b>EPA</b>	Environmental Protection Agency
<b>EQS</b>	Environmental Quality Standard
<b>EU</b>	European Union
<b>FPO</b>	Flora Protection Order
<b>GSI</b>	Geological Survey of Ireland
<b>NHA</b>	Natural Heritage Area
<b>NIAH</b>	National Inventory of Architectural Heritage
<b>NTA</b>	National Transport Authority
<b>OPW</b>	Office of Public Works
<b>pNHA</b>	proposed Natural Heritage Area
<b>PAS</b>	Priority Action Substance
<b>POPs</b>	Persistent Organic Pollutants
<b>RAL</b>	Remedial Action List
<b>RBD</b>	River Basin District
<b>RMP</b>	Record of Monuments and Places
<b>RPA</b>	Register of Protected Areas
<b>RSES</b>	Regional Spatial and Economic Strategy
<b>SAC</b>	Special Area of Conservation
<b>SEA</b>	Strategic Environmental Assessment
<b>SEO</b>	Strategic Environmental Objective
<b>SI No.</b>	Statutory Instrument Number
<b>SLA</b>	Serviced Land Assessment
<b>SPA</b>	Special Protection Area
<b>THMs</b>	Trihalomethanes
<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organisation
<b>WHO</b>	World Health Organisation
<b>WFD</b>	Water Framework Directive
<b>WRZ</b>	Water Resource Zone
<b>WWTP</b>	Wastewater Treatment Plant

## 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 Housing, Local Government and Heritage 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 were 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 Draft Roscrea Local Area Plan ("the Plan"). It has been undertaken by Tipperary County Council with mentoring and support<sup>1</sup> by CAAS Ltd. 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 is being undertaken in order to comply with European SEA Directive<sup>2</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

SEA identifies the likely significant 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 how environmental considerations were 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, a 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 environmentally appropriate development in Roscrea.

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 areas 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.

All environmental sensitivities are examined up to 15km of the Plan boundary (Section 4) and in addition, a summary of the key sensitivities occurring within and proximate (2km) to the Plan area include:

- St. Anne's, (Sean Ross Abbey), proposed Natural Heritage Area located in the Plan area

<sup>1</sup> Including ecological and flood risk expertise

<sup>2</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).

- Sheehills Esker proposed Natural Heritage Area located c. 0.5km south west of the Plan area
- Roscrea Bog proposed Natural Heritage Area located c. 0.7 km to the north-west of the Plan area;
- Mount St. Joseph Woods proposed Natural Heritage Area located c. 2.1km west of the Plan area
- Golden Grove Woods proposed Natural Heritage Area located c. 2.3km north west of the Plan area
- The ecological sensitivities associated with the Bunnow river (020) that flows through the town in a westerly direction. The WFD surface water status (2013-2018), for the River Bunnow is 'moderate'. The latest Q value for the River Bunnow is 3 - 4 (2021), with the Q Value status of moderate retained.
- Areas of high and moderate flood risk along the River Bunnow and areas of pluvial flooding in the town;
- Areas of high and extreme groundwater vulnerability throughout the town;
- Zones of archaeological importance in the centre of the town;
- Architectural Conservation Area designations in the centre of the town;
- Protected views and streetscapes in the town.

Compact development will be accompanied by placemaking initiatives and a focus on active travel and connectivity 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 more sensitive areas is also provided for, subject to various requirements relating to environmental protection and management being met.

These local sensitivities are illustrated in this report and summarised in the Non-Technical Summary.

The Plan directs incompatible development away from the most sensitive areas in the town and focuses on directing: compact, connected sustainable development within the existing compact growth area of the town; and sustainable development elsewhere.

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.



## Section 2 The Draft Plan

### 2.1 Introduction

The Plan is a local land use plan and for the proper planning and sustainable development of the 'District' town of Roscrea over the six-year period 2023-2029. The Plan sets out the Council's proposed policies and objectives for the local development of the town over the Plan period as supported by, and to be read in conjunction with the strategic planning framework as set out in the Tipperary County Development Plan 2022 - 2028.

### 2.2 Content of the Plan

The Plan comprises a Written Statement with maps and appendices.

The written statement is set out in 9 chapters as follows:

1. Introduction
2. Planning and Development Strategy
3. Town Centre Strategy
4. Economic Development Strategy
5. Sustainable Communities
6. Transport and Connectivity
7. Recognising our Local Heritage
8. Infrastructure, Energy and Utilities
9. Landuse Zoning Framework

The appendices are set out as follows:

1. Serviced Land Assessment
2. Sustainable Travel Plan
3. Regeneration Sites
4. Town Centre First Plan (to be attached when available)
5. Appropriate Assessment Screening Report and Determination
6. Strategic Environmental Assessment Report
7. Strategic Flood Risk Assessment

Maps are set out as follows:

- Map 1: Land use Zoning Objectives  
 Map 2: (a and b) Built and Natural Heritage

### 2.3 Plan Vision and Objectives

This Plan has been prepared to underpin the Core Strategy of the Tipperary County Development Plan 2022 - 2028 and its Core Ambition to deliver 'Vibrant, Living Towns

driving the Regional and Local Economy'. 10 Strategic Objectives each comply with the United Nations Sustainable Development Goals (UNSDGs), and are reflected in the Roscrea local spatial planning framework outlined.

The vision of the Plan presented underpins the 'Vision Statement' for Tipperary as set out in the Corporate Plan 2020 – 2024: Tipperary - A vibrant place where people can live, visit and work in a competitive and resilient economy, a sustainable environment and an inclusive and active community".

Roscrea is a medium sized town of 5,446 persons located in the northeast of the county. The plan boundary for Roscrea is outlined in the Core Strategy of the Tipperary County Development Plan 2022 – 2028 and remains unchanged in the Plan. The Plan extent is outlined in Figure 1 below:



Figure 1: Plan Extent

### 2.4 Relationship with other relevant Plans and Programmes

The Plan must comply with relevant higher level strategic actions and may, in turn, guide lower level strategic actions. In this regard, statutory provisions, plans, policies and strategies that set the context within which the Plan is framed and which have influenced the provisions of the Plan include:

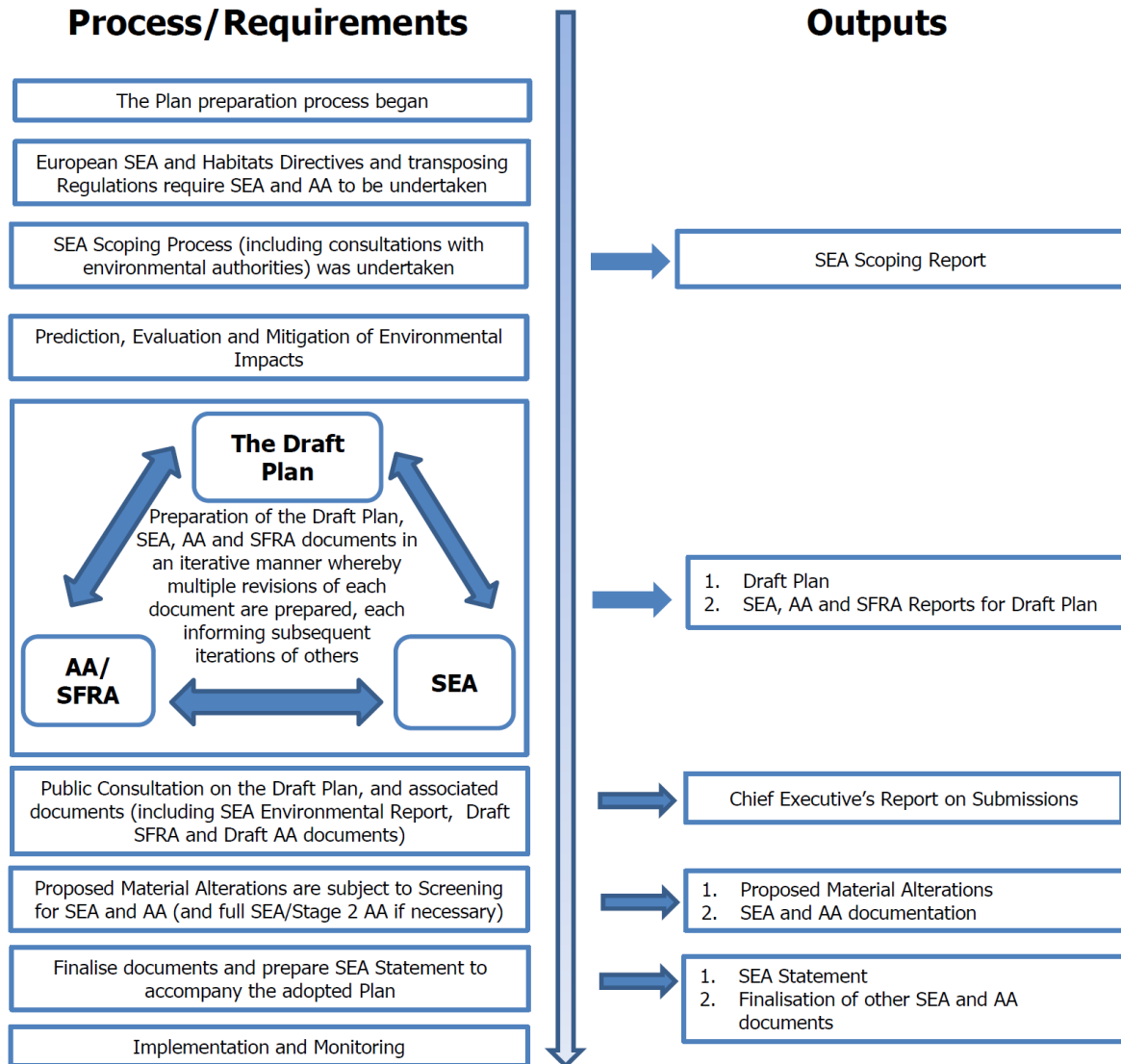
- The National Planning Framework 2018 that sets out a high-level strategic plan for shaping the future growth of Ireland and National Strategic Outcomes for realising the vision of the Plan.

- The Southern Regional Spatial and Economic Strategy 2020 that provides a long-term strategic planning and economic framework for the Southern Region in order to support the implementation of the National Planning Framework.
- The Tipperary County Development Plan 2022 - 2028 and its Core Strategy, adopted in July 2022, that contains a suite of policies and objectives, and appendices to guide development each of the County's towns and villages, including Roscrea as a 'District Town'.

## Section 3 SEA Methodology

### 3.1 Introduction to the Iterative Approach

Figure 2 provides an overview of the integrated Plan preparation, SEA, AA and SFRA processes.



**Figure 2 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 was undertaken alongside the Plan. The requirement for AA is provided under the EU Habitats Directive (Directive 1992/43/EEC).

in accordance with Article 6(3) of the Habitats Directive and Section 177U of the Planning and Development (Amendment) Act 2010 (as amended), taking into account all matters relevant, including the provisions of the Tipperary County Development Plan 2022 - 2028 it has been determined that, on the basis of objective information available at this stage, that there is no likelihood of significant effects on European sites from the Plan, individually or in combination with other plans or projects.

A final AA determination will be made in relation the Plan, having consideration to any proposed amendments and before adoption takes place. This determination will take into account any other documents prepared and submitted during the plan preparation process and any written submissions made on the draft plan and associated documents while they are on public display.

The preparation of the Plan, AA screening and SEA 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.

#### Alternatives

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

#### Impact assessment

- Effects on biodiversity and the interrelationship between biodiversity and European Sites are identified and assessed.

#### Mitigation and monitoring

- Considering 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.

#### Communication and consultation

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

## 3.3 Strategic Flood Risk Assessment

A Strategic Flood Risk Assessment (SFRA) has been undertaken alongside the Plan. The requirement for SFRA is 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. Recommendations from the SFRA have been integrated into the Plan.

## 3.4 Scoping

In consultation with the relevant authorities, 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>3</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.

### 3.4.1 Scoping Notices

Relevant environmental authorities<sup>4</sup> identified under the SEA Regulations, as amended, were all 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.

### 3.4.2 Scoping Submissions

One scoping submission was made by the Environmental Protection Agency in response to the SEA Scoping Notices and SEA Scoping Issues Paper. The issues raised in this submission were taken into account during preparation of the SEA Scoping Report and the Environmental Report.

## 3.5 Alternatives

The SEA Directive requires that reasonable alternatives (considering 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 The SEA Environmental Report

This Environmental Report provides the Council, stakeholders and the public with a clear understanding of the likely environmental consequences of implementing the Plan.

Mitigation measures to prevent or reduce significant adverse effects posed by the Plan are identified in Section 9. This Environmental Report contains 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 were encountered during the undertaking of the assessment.

## 3.7 SEA Statement

Following adoption of the Plan, a 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 which 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>3</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>4</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; Offaly County Council; Laois County Council; Kilkenny County Council; Galway County Council; Clare County Council; Limerick County Council; Waterford County Council and Cork 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
(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 I 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.

Information which is relevant to planning and project development and associated environmental assessments and administrative consent of projects is identified (note 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).

### 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 well-being for all at all ages.
- 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

By not preparing a new Local Area Plan to replace the existing Roscrea Local Area Plan 2012 (as extended), the local planning framework for the town would not be updated to take account of the higher level planning framework and associated requirements (much of which was published or updated following adoption of the Plan in 2012, including the National Planning Framework, the Southern Regional Spatial and Economic Strategy and the Tipperary County Development Plan 2022) and environmental information and requirements, including that related to flood risk.

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

- Contribution towards protection of ecology (including designated sites, ecological connectivity, habitats) by facilitating development of lands 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-served lands elsewhere in the town.
- 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 long-established 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 that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-served lands elsewhere in the town.
- Contribution towards the protection of human health by facilitating development of lands 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-served lands elsewhere in the town.
- 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 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-served lands elsewhere in the town.
- 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 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-served lands elsewhere in the town.
- 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 that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-served lands elsewhere in the town.



- 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 sustainable compact growth, sustainable mobility, sustainable design and energy efficiency.
  - Contribution towards climate mitigation and adaptation by facilitating compact development of lands that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-served lands elsewhere in the town.
  - 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;
    - Renewable energy; and
    - Sustainable design, energy efficiency and green and blue infrastructure.
  - Contributes towards protection of cultural heritage within the town by facilitating brownfield development and regeneration.
  - Contributes towards protection of wider landscape and landscape designations by facilitating development within the town.
- 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 agriculture and soil, water, biodiversity and human health – including phosphorous and nitrogen deposition as a result of agricultural activities 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.

As a result, there would be an increased likelihood in the extent, magnitude and frequency of adverse effects on all environmental components 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
  - 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 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.

## 4.5 Natural Capital and Ecosystem Services

The natural capital of Roscrea and its surrounding area comprises its 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 give us 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.

Ecosystems are multifunctional communities of living organisms interacting with each other and their environment. Ecosystems provide a series of services for human well-being (ecosystem services) either directly or indirectly contributing towards human wellbeing. There are four main types; provisioning, regulating, supporting and 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 services include non-material benefits that people obtain from ecosystems such as spiritual enrichment, intellectual development, recreation and aesthetic values<sup>5</sup>.

This Plan and local policy objectives therein to complement the existing policies and objectives outlined in the County Development Plan, that seek to:

- a) Consider natural systems – by using knowledge of interactions in nature and how ecosystems function
- b) Consider the services that ecosystems provide – including those that underpin social and economic well-being, such as flood and climate regulation or for recreation, culture and quality of life
- c) Involve 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 Plan and will further inform the final plan before its adoption.

## 4.6 Biodiversity and Flora and Fauna

### 4.6.1 Introduction

Information on biodiversity and flora and fauna that is relevant to project planning and development and associated environmental assessment and administrative consent of projects includes that on designated ecological sites and protected species, ecological

connectivity (including stepping stones and corridors) and non-designated habitats.

### 4.6.2 Overview of High Value Biodiversity and Designations

The Town falls into the catchment of the River Shannon, though the border of the Nore catchment is not far outside the LAP boundary to the south. The Shannon/Nore catchment boundary is identical to the River Basin District boundary. It splits the South Eastern RBD from the Shannon RBD in which Roscrea lies. The Bunnow River and its associated tributaries support biodiversity. Ecological sites within and surrounding the Plan area include those relating to:

- The Slieve Bloom Mountains Special Protection Area 004160 located c. 3km northwest of the Plan area
- St. Anne's, (Sean Ross Abbey), proposed Natural Heritage Area located in the Plan area
- Sheehills Esker proposed Natural Heritage Area located c. 0.5km south west of the Plan area
- Roscrea Bog proposed Natural Heritage Area located c. 0.7 km to the north-west of the Plan area;
- Mount St. Joseph Woods proposed Natural Heritage Area located c. 2.1km west of the Plan area
- Golden Grove Woods proposed Natural Heritage Area located c. 2.3km north west of the Plan area
- Drumakeenan, Eagle Hill and Perry's Mill proposed Natural Heritage Area located c. 3km north west of the Plan area
- The ecological sensitives associated with the Bunnow river (020) that flows through in a westerly direction.

A network of green spaces, including gardens, parks, graveyards, amenity walks, railway lines and patches of woodland and scrub, provide habitats and ecological connectivity within the town and beyond.

#### Ecological designations

A 15 km zone of influence around the Plan area has considered:

- Special Protection Areas (SPAs)<sup>6</sup>;

<sup>5</sup> <https://biodiversity.europa.eu/topics/ecosystem-services>

<sup>6</sup> SPAs have been selected for protection under the 1979 European Council Directive on the Conservation of Wild

- Proposed Natural Heritage Areas (pNHAs)<sup>7</sup>;
- Certain entries to the Water Framework Directive Register of Protected Areas<sup>8</sup>;
- Salmonid Waters<sup>9</sup>;
- Freshwater Pearl Mussel catchments<sup>10</sup>;
- CORINE Landcover<sup>11</sup>;
- Other sites of high biodiversity value or ecological importance;
- Watercourses, wetlands, eskers and peatlands;
- Ecological connectivity and networks including watercourses.

Ecological networks are important in connecting areas of local biodiversity with each other and with nearby designated sites so as to prevent islands of habitat from being isolated entities. Ecological networks are composed of linear features, such as treelines, hedgerows, rivers and streams, which provide corridors or stepping stones for wildlife species moving within their normal range. They are particularly important for mammals, especially for bats and small birds. Key ecological corridors within the Town include the Bunnow River, the railway line and the hedgerows within the Plan area.

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Birds (79/409/EEC) - referred to as the Birds Directive - due to their conservation value for birds of importance in the European Union. **There are no SPAs designated within the Plan area, however there is one SPA within approx. 3km of the Plan area: Slieve Bloom Mountains Special Protection Area 004160. This will be considered by the assessments.**

<sup>7</sup> pNHAs were published on a non-statutory basis in 1995, but have not since been statutorily proposed or designated. These sites are of significance for wildlife and habitats. **Within the plan area, there is one pNHA, St. Annes (Sean Ross Abbey). Roscrea Bog pNHA and Monaincha Bog NHA lie to the east of the Town, Sheehills Esker lies to the south. Most of the esker ridges are wooded but some support grasslands and contain a number of locally uncommon plant species. Monaincha Bog is of considerable conservation significance, comprising as it does, a raised bog, a rare habitat in the E.U. Much of the high bog has vegetation typical of the true Midland Raised Bog type, consisting of Ling Heather, cottongrass and Carnation Sedge. The site supports a good diversity of raised bog microhabitats including hummock/hollow complexes, and a large soak system.**

<sup>8</sup> These areas are those identified as those requiring special protection under existing national or European legislation, either to protect their surface water or groundwater, or to conserve habitats or species that directly depend on those waters. **Roscrea lies just outside of the River Nore catchment which is designated for the presence of a Freshwater Pearl Mussel population. Various entries to these registers are found within and adjacent to Tipperary and any sites within or proximate to the Plan area and entries to the RPAs that can be seen at <https://qis.epa.ie/EPAMaps/> will be considered by the assessments.**

<sup>9</sup> Salmonid waters are designated and protected as under the European Communities (Quality of Salmonid Waters) Regulations 1988 (S.I. No. 293 of 1988). Designated Salmonid Waters can support salmon (*Salmo salar*), trout (*Salmo trutta*), char (*Salvelinus*) and whitefish

The zone of influence of the Plan with respect to impacts upon ecology via surface waters – including designated ecology – can be estimated to be areas within 15 km of the Plan boundary and all downstream areas of catchments which drain the plan area.

### 4.6.3 European Sites

European sites comprise:

- Special Areas of Conservation<sup>12</sup> (SACs); and
- Special Protection Areas<sup>13</sup> (SPAs).

The SEA uses a 15 km buffer around the Plan area. There are 10 European sites designated within this zone (mapped on Figure 3), however, there are no European sites with the plan area. There is closest SPA is located within approx. 3km of the Plan area: Slieve Bloom Mountains Special Protection Area 004160.

(*Coregonus*). **There are no designated waters in the Plan area, however, the main channel of the River Nore to the southeast outside of the catchment and plan area is designated as a salmonid river.**

<sup>10</sup> Freshwater pearl mussel (*Margaritifera margaritifera*) is a globally threatened, long-lived and extremely sensitive species that can be impacted by many forms of pollution, particularly sediment and nutrient pollution and by hydrological and morphological changes, which may arise from developments, activities or changes in any part of the catchment. **There is an area of *Margaritifera* catchment (catchments of SAC populations listed in SI 296 of 2009) (Nore river catchment) located c. 1.5km to the southern parts of the Plan area.**

<sup>11</sup> 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.

<sup>12</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 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.

<sup>13</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 EU.

Other European sites shown on 4.1 include sites connected to the town via hydrological links but beyond the 15 km buffer.

All European sites and their sensitive features are listed in the Appendix II of this report.

#### 4.6.4 Natural Heritage Sites and Proposed Natural Heritage Areas

Proposed NHAs (pNHAs) were published on a non-statutory basis in 1995, but have not since been statutorily proposed or designated. 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.

Within the plan area, there is one pNHA, St. Annes (Sean Ross Abbey). Roscrea Bog pNHA and Monaincha Bog NHA lie to the east of the Town, Sheehills Esker lies to the south. Most of the esker ridges are wooded but some support grasslands and contain a number of locally uncommon plant species. Monaincha Bog is of considerable conservation significance, comprising as it does, a raised bog, a rare habitat in the E.U. Much of the high bog has vegetation typical of the true Midland Raised Bog type, consisting of Ling Heather, cottongrass and Carnation Sedge. The site supports a good diversity of raised bog microhabitats including hummock/hollow complexes, and a large soak system (Figure 4).

#### 4.6.5 Land Cover Mapping

CORINE<sup>14</sup> land cover mapping for the County is shown on Figure 4. The most dominant land cover types are pastures and agricultural lands (occurring throughout the County).

Categories from CORINE mapping that may indicate areas with the potential for Annex I habitats (see Figure 5), include:

- Non-irrigated arable land;
- Fruit trees and berry plantations;
- Pastures;
- Annual crops associated with permanent crops;
- Land principally occupied by agriculture with significant areas of natural vegetation;
- Broad-leaved forest;
- Coniferous forest;
- Mixed forest;
- Natural grassland;
- Moors and heathland;
- Transitional woodland-shrub;
- Sparsely vegetated areas;
- Inland marshes;
- Peat bogs;
- Water courses; and
- Water bodies.

#### 4.6.6 Register of Protected Areas

In response to the requirements of the Water Framework Directive 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 County designated by virtue of their value to biodiversity are addressed in this section while RPAs designated by virtue of their value to humans are addressed under Section 4.9.8.

Water bodies designated by virtue of their value to biodiversity (mapped on Figure 3). There are also a number of water dependent habitats that have been listed on RPAs relating to biodiversity – these relate to designated SACs and SPAs (see Section 4.6.3).

#### 4.6.7 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

<sup>14</sup> The CORINE (Coordinated 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.

programmes and the methods of analysis and inspection to be used by local authorities to determine compliance with the standards. (Figure 6).

#### 4.6.8 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 pollution and by hydrological and 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* and *Margaritifera durrovensis*) and both are protected under Annex II and Annex V of the EU Habitats Directive. Margaritifera Sensitive Areas are found within the Nore Upper (catchments of SAC populations listed in S.I. 296 of 2009); (mapped on Figure 7):

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 Plan area lies north of the River Nore catchment which is designated for the presence of a Freshwater Pearl Mussel population.

#### 4.6.9 Other Designations

Other designations within considered (mapped on Figure 8) include Nature Reserves.

Nature Reserves are areas of importance to wildlife, protected under Ministerial order. There are currently 78 Statutory Nature Reserves in Ireland. Most are owned by the State but some are owned by organisations or private landowners.

There are no Ramsar Sites<sup>15</sup> designated proximate to the plan area. Ramsar Sites closest to Roscrea (mapped on Figure 4.7) include the Slieve Bloom Mountains Ramsar

Site (no. 335), located approx. 10 km to the north, within Counties Laois and Offaly.

#### 4.6.10 Other Sites of Ecological Importance

Surrounding the Plan area, ecological networks are made up of components including lakes, wetlands, woodlands, trees and hedgerows. These components provide habitats for flora and fauna and facilitate linkages to the surrounding countryside for flora and fauna.

Hedgerows are valuable resource in the countryside, benefiting agriculture, wildlife, the environment, tourism, and the general community. The network of hedges across the country provides links between surviving fragments of other wildlife habitats, thereby allowing the movement and dispersal of species through otherwise hostile agricultural landscapes.

Peatlands are unique systems comprising of peat soil providing as significant carbon stores and supporting a range of unique species. Active blanket bogs and active raised bogs are considered to be priority habitats, listed on Annex I of the EU Habitats Directive. Peatlands occurring in Tipperary include raised bogs, blanket bogs, fens and cutover bogs. Cutover bog is a variable habitat, or complex of habitats, that can include mosaics of bare peat and re-vegetated areas with woodland, scrub, heath, fen and flush or grassland communities. It occurs where part or all of the original peat has been removed through turf cutting, by the traditional hand method or mechanically, for either domestic or commercial purposes. Active blanket bogs and active raised bogs are considered to be priority habitats, listed on Annex I of the EU Habitats Directive.

Important Bird Areas are a BirdLife International initiative aimed at identifying and protecting a network of critical sites for the conservation of the world's birds. BirdWatch Ireland Important Bird Areas (IBAs)<sup>16</sup> within or partially within County Tipperary include:

<sup>15</sup> Ramsar sites are wetlands designated to be of international importance under the Convention of Wetlands of International Importance (especially as Water Fowl Habitat), established at Ramsar in 1971 and ratified by Ireland in 1984. The main aim of the Convention is to secure the designation by each contracting state of wetlands in its territory for inclusion in a list of wetlands of international importance for waterfowl. This entails the commitment of each contracting state to a policy of

protection and management of the designated wetlands, and of formulating and implementing planning so as to promote the conservation of designated wetlands and, as far as possible, the wise use of wetlands in its territory. Ireland presently has 45 sites designated as Wetlands of International Importance, with surface areas of 66,994 hectares.

<sup>16</sup> There are 105 Important Bird Areas in Ireland.

Lough Derg (River Shannon), and River Little Brosna Callows: New Bridge – River Shannon.

legislative objectives governing biodiversity and fauna were not identified as being conflicted with.

Other sites of ecological importance include those used by pollinators. The Heritage Council's "All-Ireland Pollinator Plan" aims to manage roadside verges and green spaces in a way that allows us to maintain safe and accessible roadsides but also support pollinators, and to alter mowing regimes and reduce pesticide use. These areas can be used to create and enhance the ecological networks and wildlife corridors by increasing connectivity and biodiversity. It is anticipated to prepare "Pollinator Action Plan" for County Tipperary over the lifetime of the Plan.

#### 4.6.11 Existing Problems

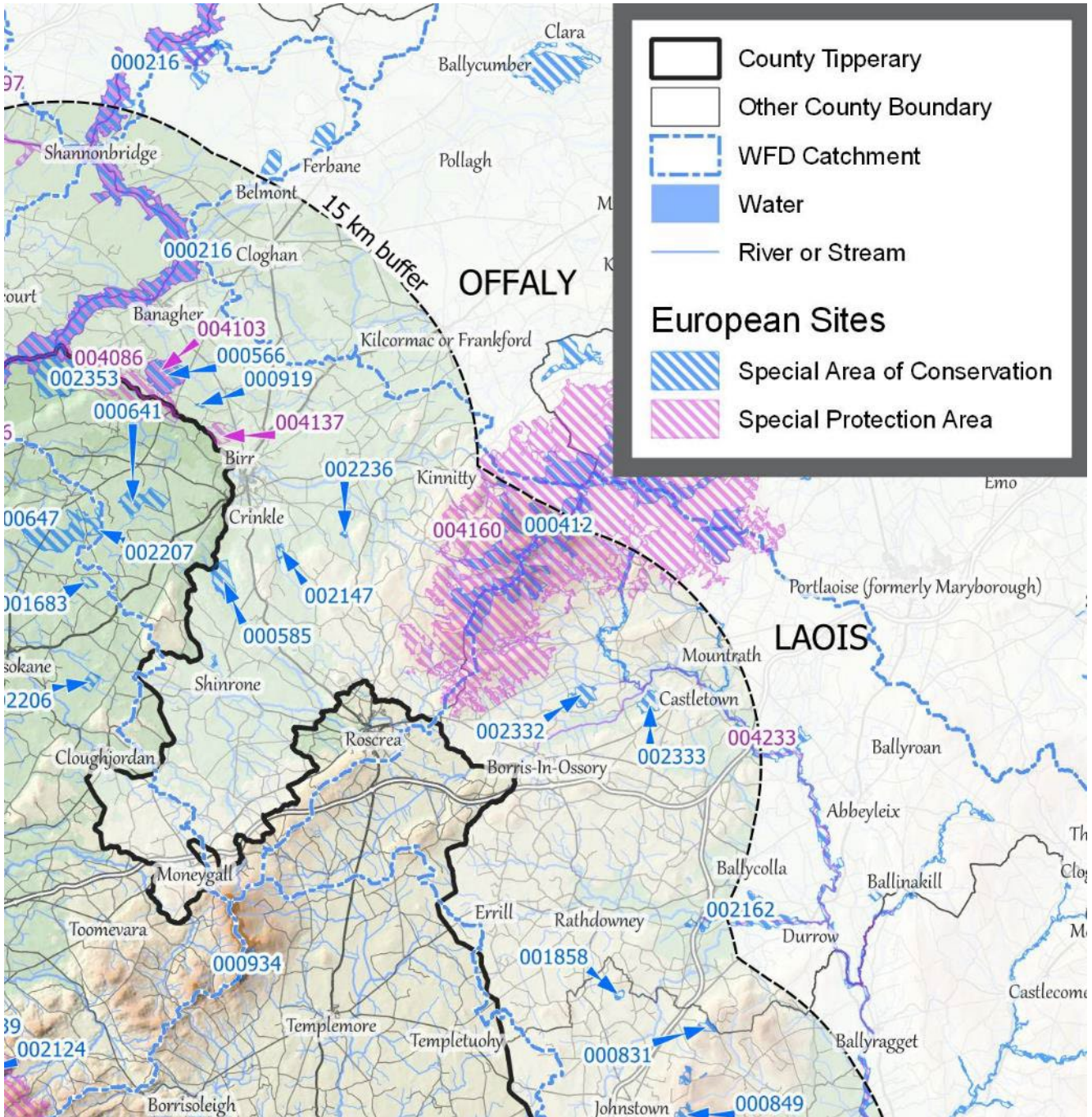
Ireland's Article 17 report on the Status of EU Protected Habitats and Species in Ireland (DCHG, 2019) identifies various Irish, EU-protected habitats and species to be of unfavourable status and many to be still declining, although it also identifies that a range of positive actions are underway. Categories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

- Agriculture;
- Forestry;
- Extraction of resources (minerals, peat, non-renewable energy resources);
- Energy production processes and related infrastructure development;
- Development and operation of transport systems;
- Development, construction and use of 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.

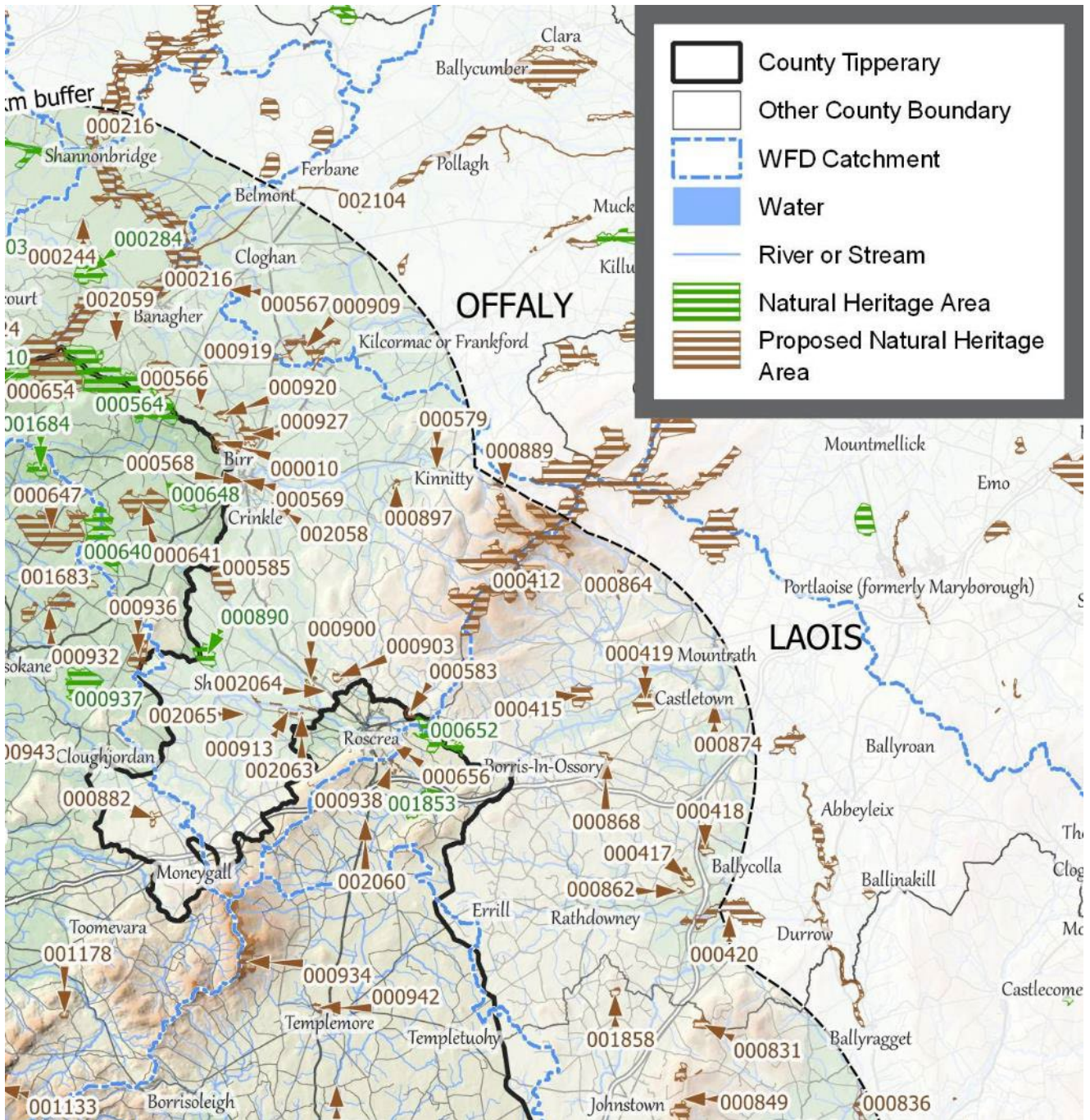
Ireland's Article 12 Birds Directive Reports and the 6<sup>th</sup> National Report under the Convention of Biological Diversity identifies similar issues.

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,



**Figure 3 European sites within and within 15 km of the Town**



**Figure 4 NHAs and pNHAs within and within 15 km of the Town**



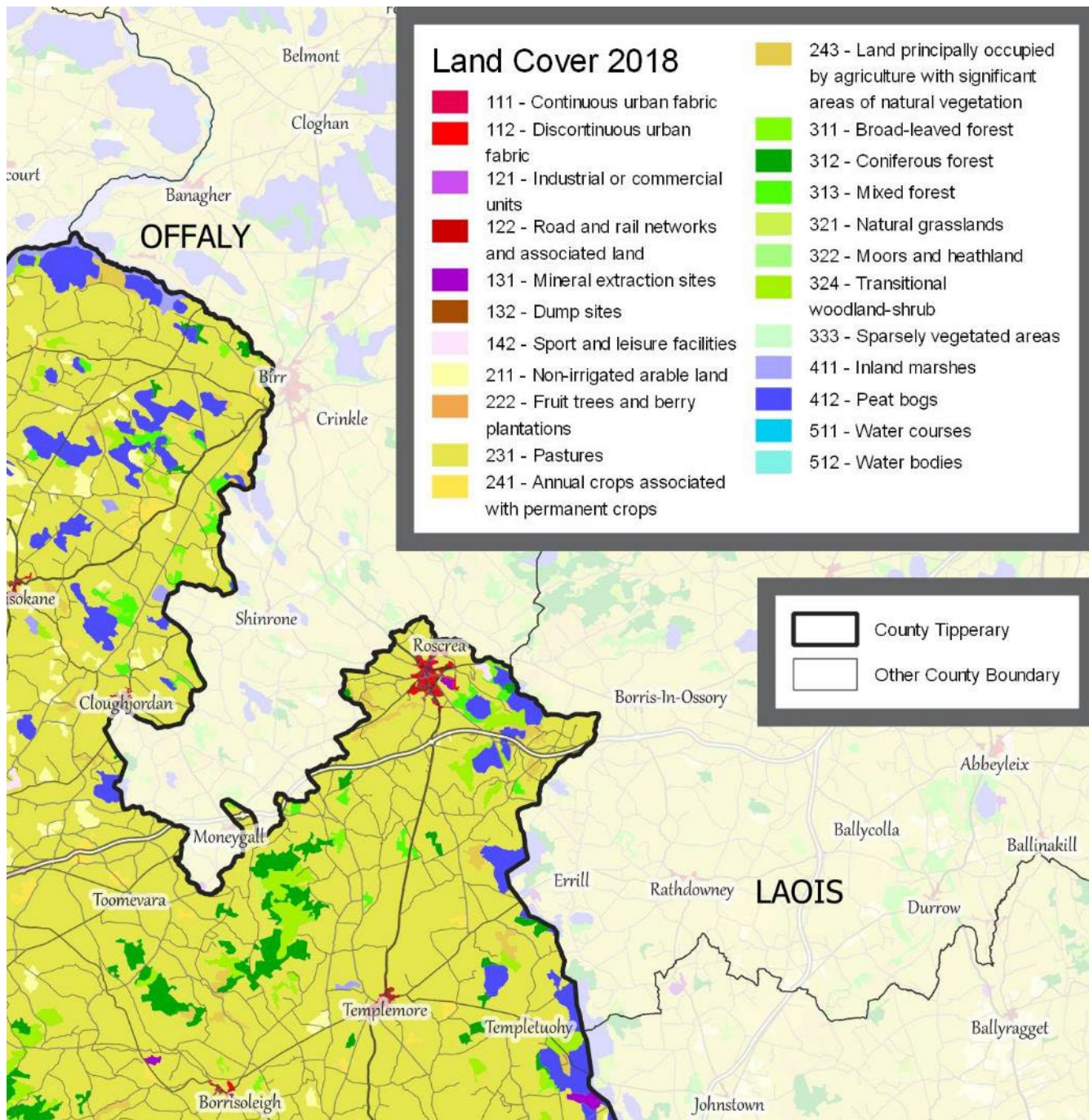
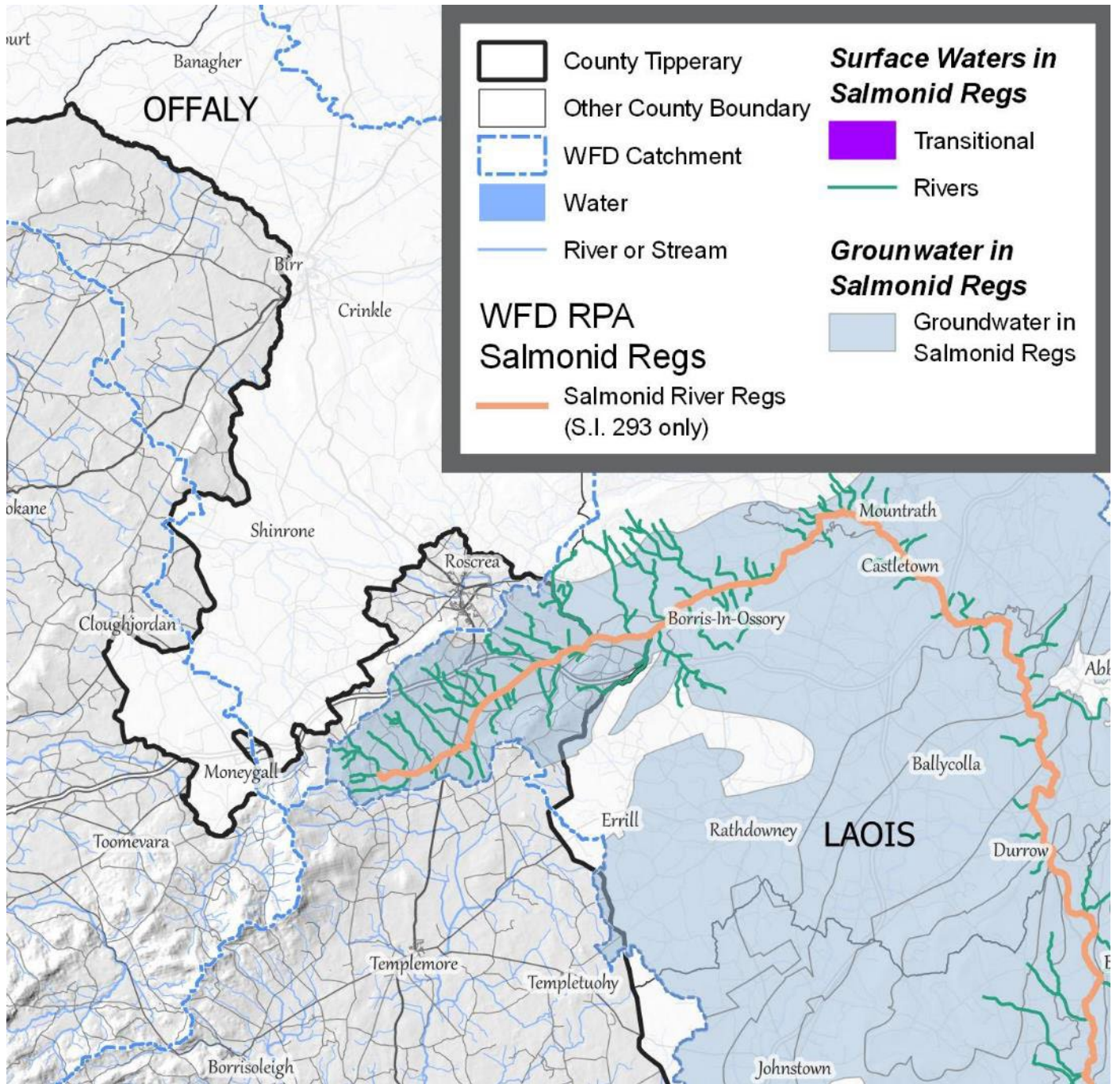
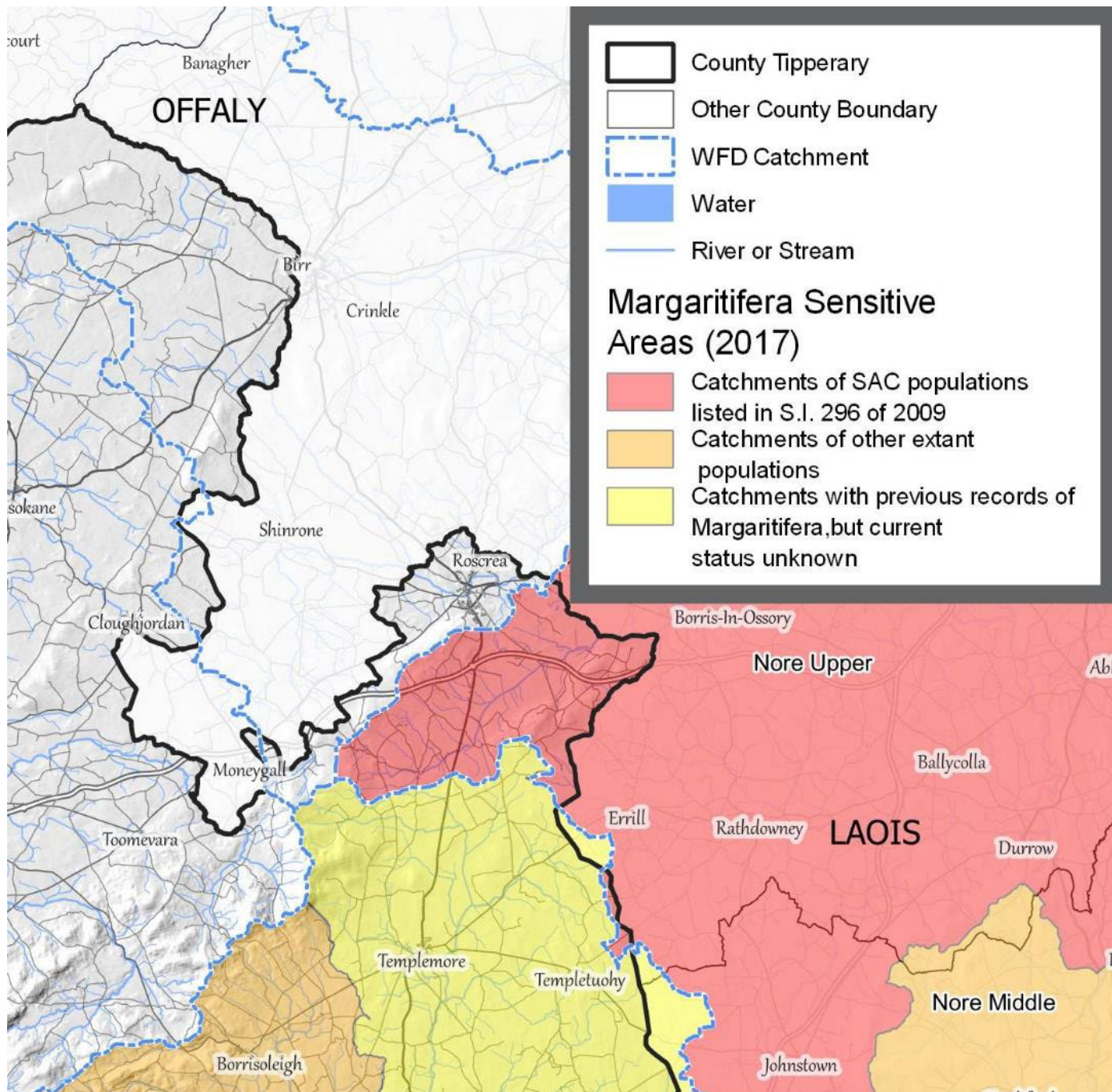


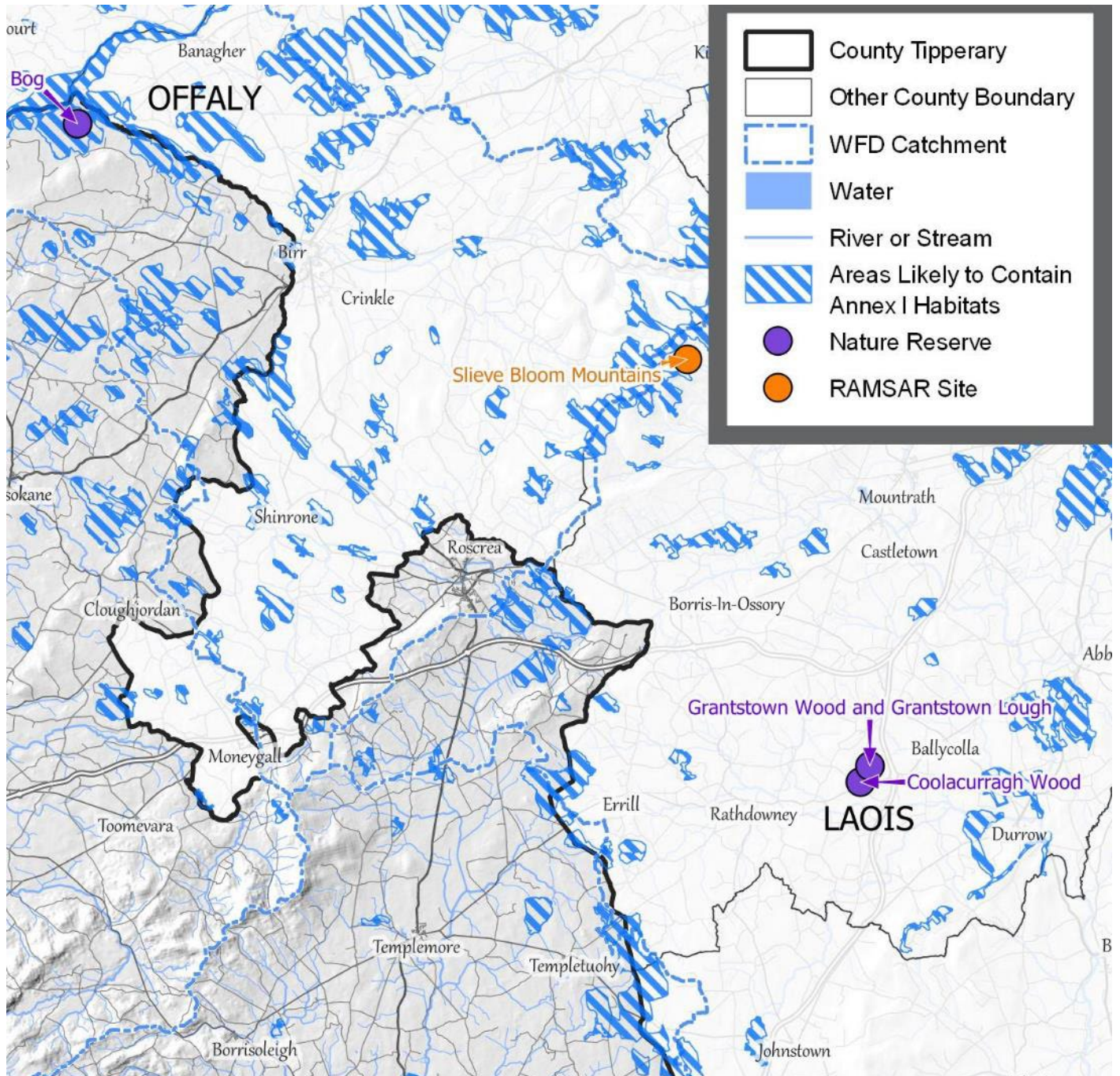
Figure 5 CORINE Land Cover 2018



**Figure 6 WFD Register of Protected Areas Salmonid Waters**



**Figure 7 Margaritifera Sensitive Areas**



**Figure 8 Other Ecological Designations**

## 4.7 Population and Human Health

### 4.7.1 Population

Census 2016 recorded a population of 5,446 persons in Roscrea. The Core Strategy in the Tipperary County Development Plan 2022-2028 provides a population increase of 726 persons for Roscrea over the Plan period<sup>17</sup>.

Roscrea is identified as a "District Town" in the Tipperary County Development Plan 2022-2028, supporting the regional driver role of Nenagh, 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 new population provided for will interact with various environmental components. Potential interactions include:

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

### 4.7.2 Human Health

Human health has the potential to be impacted upon by 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 arising from incompatible adjacent land uses for example. 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

There is historic and predictive evidence of localised flooding in various locations across the town (see information on Strategic Flood Risk Assessment at Section 4.9.10).

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. The number of homes within the town with radon levels above the reference level is within the normal range experienced in other locations across the country<sup>18</sup>.

Information on the status of groundwaters and surface waters is provided under Section 4.9 while compliance issues in relation to water services are detailed under Section 4.11.9.

## 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 a 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 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 and 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

17 Tipperary County Council (2022): Tipperary County Development Plan 2022 - 2028

18 Mapping available at <http://www.epa.ie/radiation/radonmap>

objectives to achieve healthy soils by 2050, with concrete actions by 2030. It also announced a new Soil Health Law by 2023 to ensure a high level of environmental and health protection.

Aside from “man made” ground and bog, the area is made up of mineral soils (See Figure 9). Main soil types<sup>19</sup> surrounding built up areas of Roscrea are Luvisol soils in the Plan area and Groundwater Gley to the southeast<sup>20</sup>. Subsoils in the Plan area consist mainly of limestone sands and gravels and limestone till.

Geological Survey of Ireland coordinates the Irish Geological Heritage Programme, which seeks to identify and select sites of geological interest. County Geological Sites (CGSs) when audited, 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 Tipperary was completed in 2016, which identified 28 CGSs, however, there are no designated geological sites within the Plan area.

Roscrea is undulating and hilly in its local topography with evidence of historic quarrying at points in the town and environs. The majority of the Plan area is underlain with fossiliferous dark-grey muddy limestone. Pale and red sandstone, grit and claystone lies south of that. A band of sandstone, mudstone and thin limestone separates these areas. A quarry area is located near Roscrea, just outside of the LAP boundary to the south, two registered quarries lie within this area.

#### 4.8.1 Geological Sites

Geological Survey of Ireland coordinates the Irish Geological Heritage Programme, which seeks to identify and select sites of geological interest within administrative areas across the country. The audit of County Geological Sites in County Tipperary was completed in 2019 and identified 69 County Geological Sites<sup>21</sup>. Geological Sites<sup>22</sup> are mapped on Figure 10.

<sup>19</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 (<http://gis.teagasc.ie/soils/soilguide.php>).

<sup>20</sup> Generally fertile soils, widely used for agriculture and associated with significant accumulation of clay.

<sup>21</sup> Geological Survey of Ireland (2019) *The Geological Heritage of County Tipperary. An audit of County Geological Sites in County Tipperary 2019*.

<sup>22</sup> County Geological Sites and Sites of Geological Interest in the neighboring counties, which straddle County

The closest geological site to Roscrea is TY053 ‘Nore Valley Bogs’, this is located far to the south on the far side of the M7 motorway.

#### 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.

Under the Tipperary County Development Plan 2022 (Chapter 12), where brownfield redevelopment is proposed, adequate and appropriate investigations are required to be carried out into the nature and extent of any soil and groundwater contamination and the risks associated with site development work.

#### 4.8.2 Source Protection Areas

Source Protection Area delineation provides an assessment of the land area that contributes groundwater to a borehole or spring. Source reports have been undertaken by the GSI on behalf of Local Authorities since the mid-1990s.

Public Supply Source Protection Areas comprise are managed by Irish Water to supply Public Water Supply Schemes across Ireland. Source Protection Areas provide protection by placing tighter controls on activities within all or part of the zone of contribution of the source.

Groundwater bodies are important water supply sources for private wells, group schemes and local authority supplies and for use in a range of commercial activities. This is particularly the case in rural areas that are not served by public or group water schemes, with private bored wells being the only source of supply.

Public Supply Source Protection Areas (including Inner and Outer Protection Areas<sup>23</sup>) and Group Scheme Preliminary Source Protection Areas<sup>24</sup> are shown on Figure 11.

Tipperary boundaries have been also considered by the assessment.

<sup>23</sup> The Zone of Contribution is the land area that contributes water to the well or spring. The Inner Protection Area (SI) is designed to protect against the effects of human activities that might have an immediate effect on the source and, in particular, against microbial pollution. The Outer Protection Area (SO) is encompassing the remainder of the zone of contribution to the groundwater abstraction point (e.g. borehole or spring).

<sup>24</sup> The Group Scheme Preliminary Source Protection Areas comprises Zones of Contribution to groundwater

and it can be seen that there is not source protection area within or proximate to 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.

The GSI have identified that there is an area of moderately high landslide susceptibility to the south west of the plan area (as mapped on Figure 4.11).

### **4.8.4 Existing Problems**

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

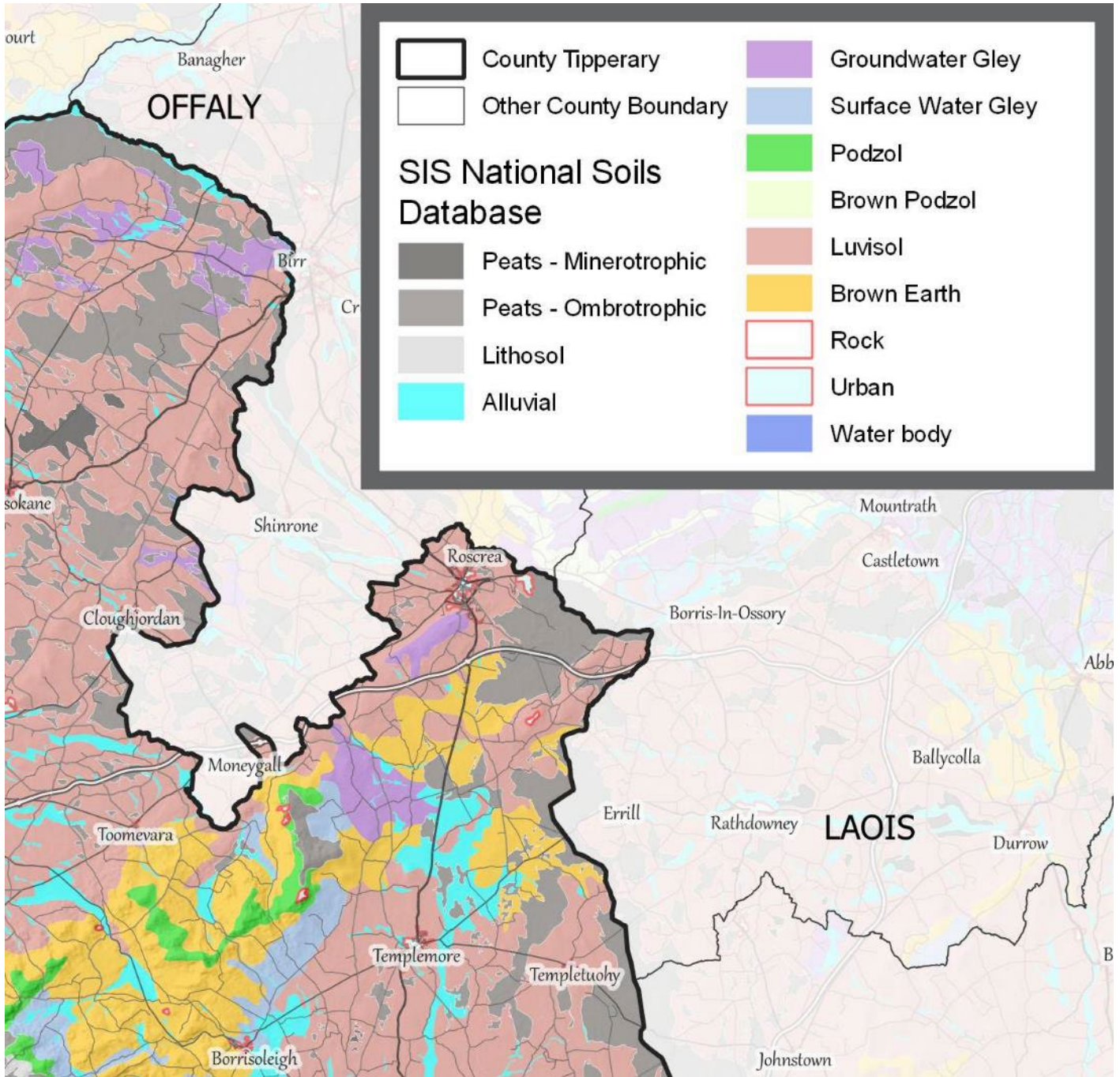
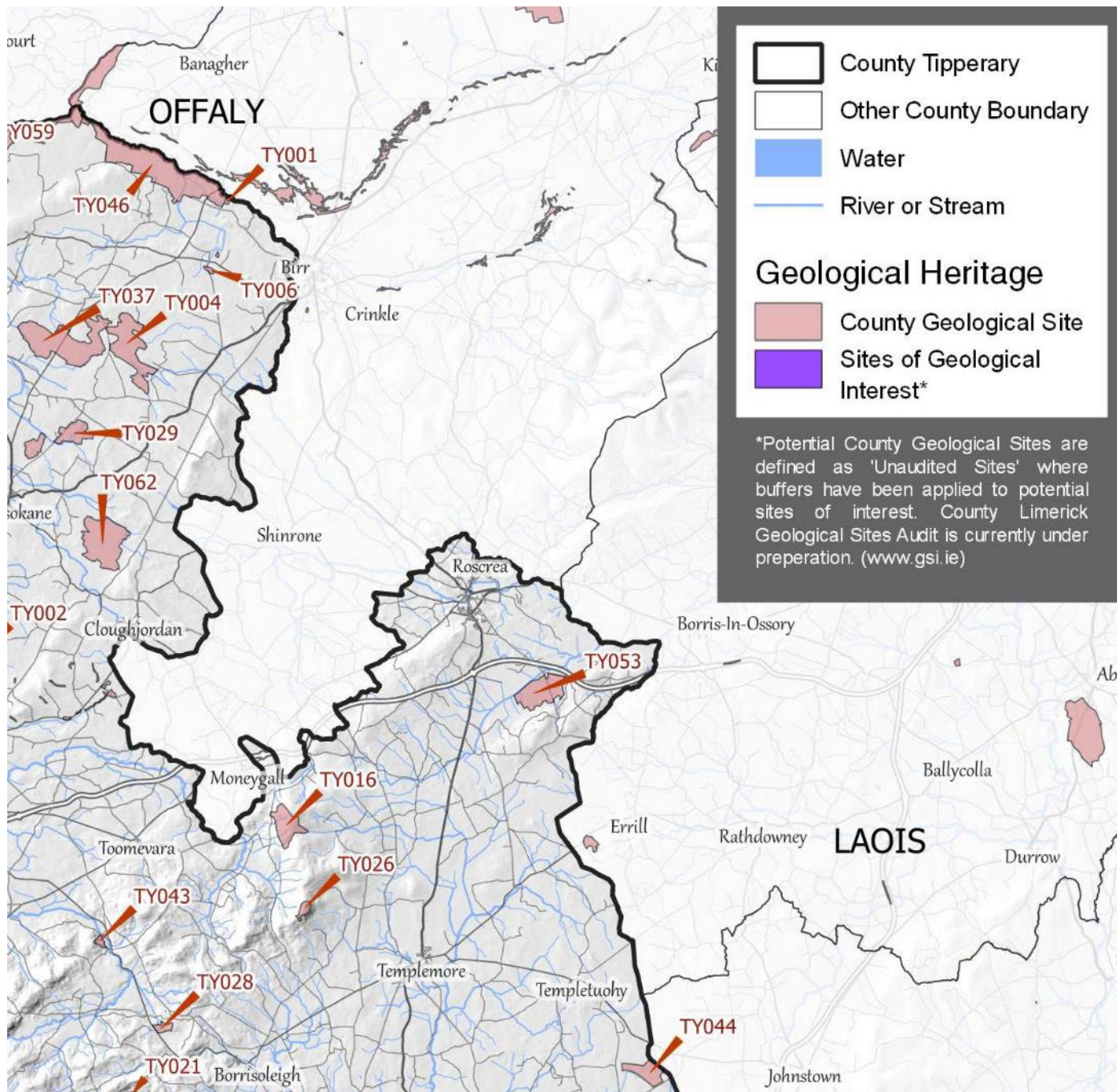
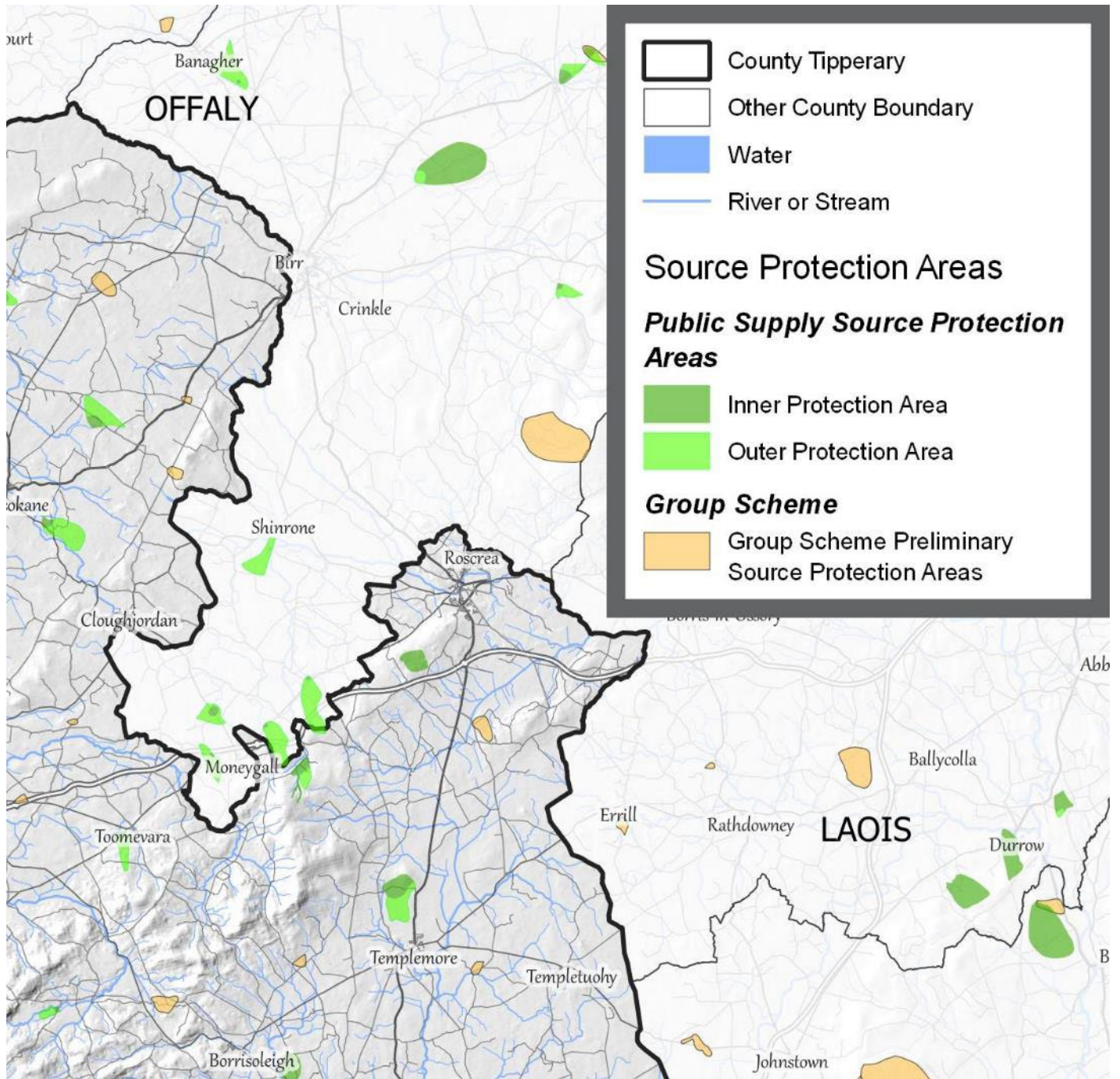


Figure 9 Soil Type

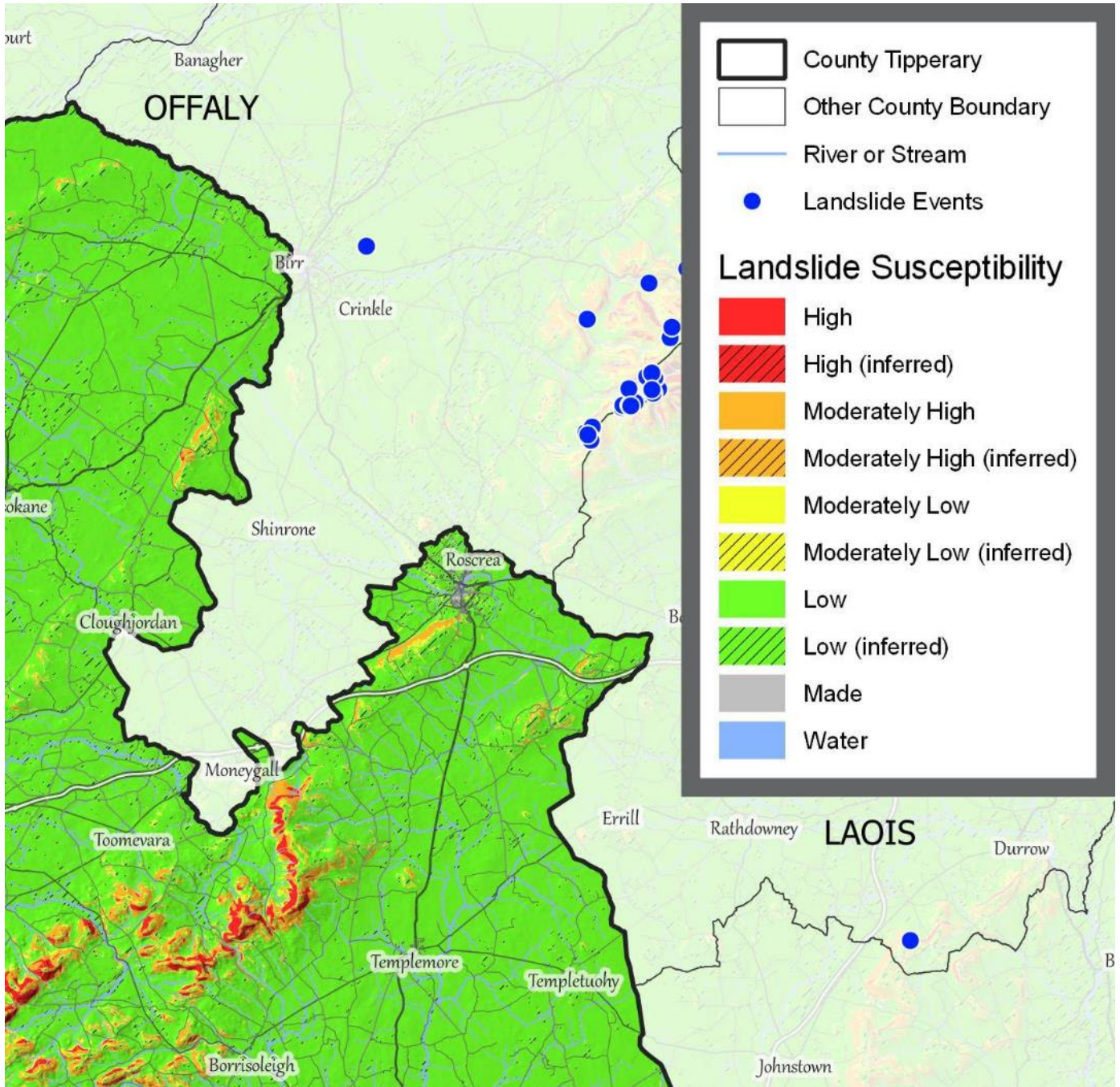




**Figure 103 County Geological Sites**



**Figure 11 Source Protection Areas**



**Figure 42 Landslide Susceptibility and Previous Landslide Events**

## 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.

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 that are in turn divided into specific, clearly defined water bodies.

### 4.9.2 Zone of Influence

The zone of influence of the Plan, with respect to impacts upon waters can be estimated to be all bodies of groundwater and all surface waters within the catchment.

### 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 Town falls into the catchment of the River Shannon, though the border of the Nore catchment is not far outside the LAP boundary to the south. The Shannon/Nore catchment boundary is identical to the River Basin District boundary. It splits the South Eastern RBD from the Shannon RBD in which Roscrea lies. The Bunnow River and its associated tributaries support biodiversity.

### 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'.

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 WFD surface water status (2013-2018), for the River Bunnow is shown on Figure 13 The River Bunnow is classified as 'moderate'. The latest Q value for the River Bunnow is 3--4 (2021), with the Q Value status of moderate retained. (there are a number of minor tributaries/drains both within and connected to the plan area)

Significant pressures, those pressures which need to be addressed in order to improve

water quality, have been identified<sup>25</sup>. Significant pressures for surface water bodies within or adjacent to the Plan area are identified. There are various types of relevant pressures identified, such as:

- **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.
- **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.
- **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

#### 4.9.6 Ground Water

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 (2013-2018) of groundwater underlying the Plan area is identified as being of *good* status. (Figure 14)

(channelisation), 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; and recreational activities.

- **Industrial pressures**— can include discharges and emissions from industrial and commercial facilities.
- **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 Pressures on Water Quality in Roscrea

In line with the WDF the improvement of the Q value of the River Bunnow to at least good status is a key objective to be managed as part of plan implementation, having particular reference to management of pressures, including urban run-off and urban waste water pressures.

#### 4.9.7 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 vulnerability of aquifers underlying the Plan area are mapped on Figure 14 and is classified as 'high'.

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 15. Productivity classification for the Plan area is

- *Regionally important gravel aquifer.*

#### 4.9.8 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

<sup>25</sup> EPA (2022) Report on Water Quality in Ireland 2016-2021

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).

There are also a number of RPAs in the Plan area designated by virtue of their value to biodiversity – these are addressed under Section 4.6 “Biodiversity and Flora and Fauna”.

### **4.9.9 Bathing Waters**

Bathing locations identified as ‘Bathing Waters’ under the Bathing Water Regulations 2008, as amended. For bathing waters, Mandatory and Guide Values are set out for bathing waters in the 2006 EU Bathing Water Directive and transposing Regulations. Mandatory Values are values that must be observed if the bathing area is to be deemed compliant with the Directive. Compliance with Guide Values exceeds guidance with Mandatory Values and can be regarded as quality objectives which bathing sites should endeavour to achieve.

There are no bathing waters in the Plan area.

### **4.9.10 Flooding**

The Office of Public Works (OPW) in 2012 identified Roscrea as requiring detailed assessment of flood risk (Areas for Further Assessment). Detailed predictive flood risk mapping is now available for the town.

A Strategic Flood Risk Assessment (SFRA), as required by ‘The Planning System and Flood Risk Management Guidelines for Planning Authorities’ (DEHLG and OPW, 2009), has been undertaken alongside the preparation of the SEA and the preparation of the Plan. This assessment has considered available and emerging information on historical and predictive flood risk indicators. (Figure 18)

### **4.9.11 Existing Problems**

Subject to exemptions provided for by Article 4 of the WFD, based on available water data, the River Bunnow 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 in the Plan area.

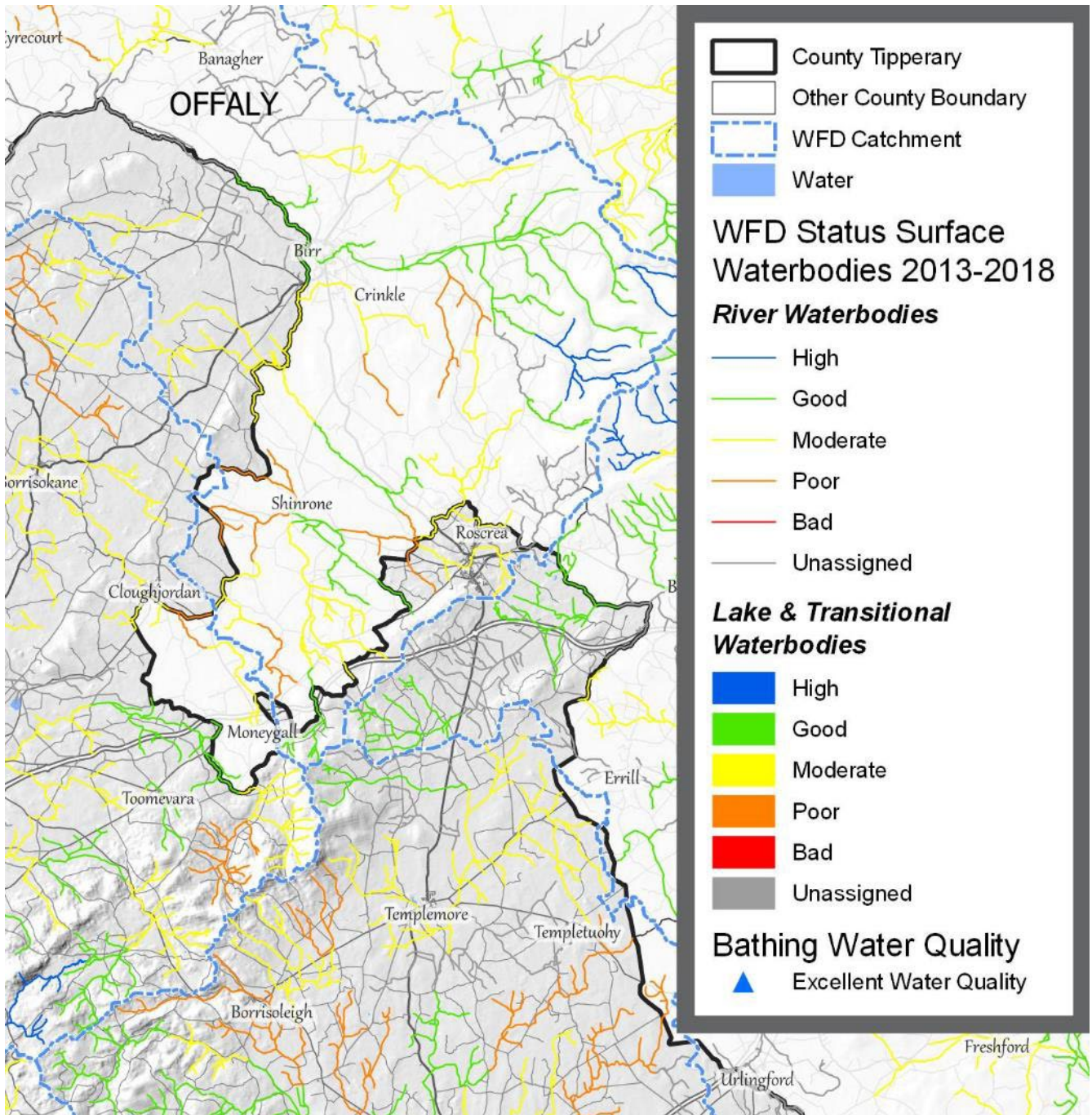
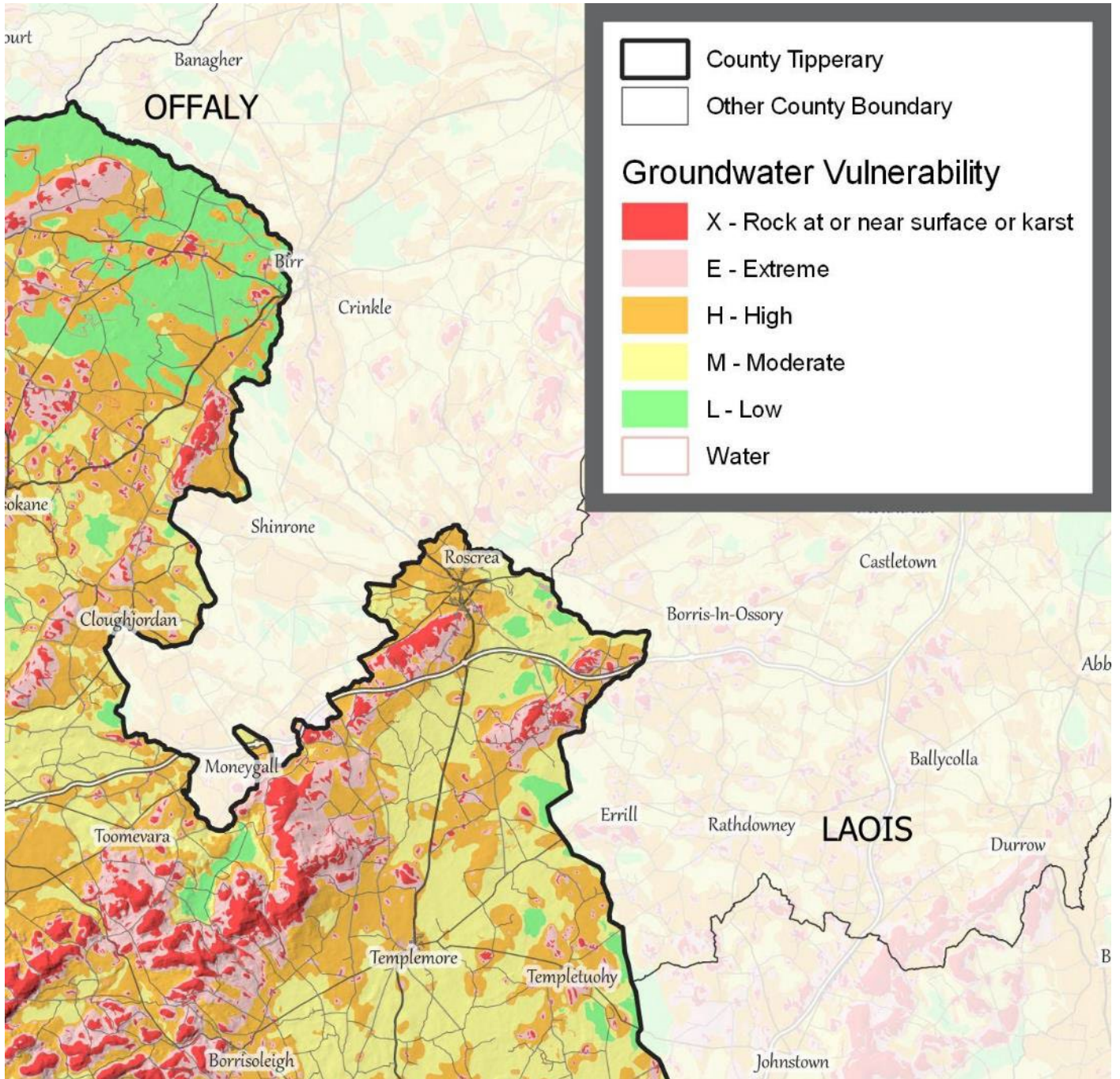


Figure 13 WFD Surface Water Status (2013-2018)



**Figure 14 Groundwater Vulnerability (GSI)**



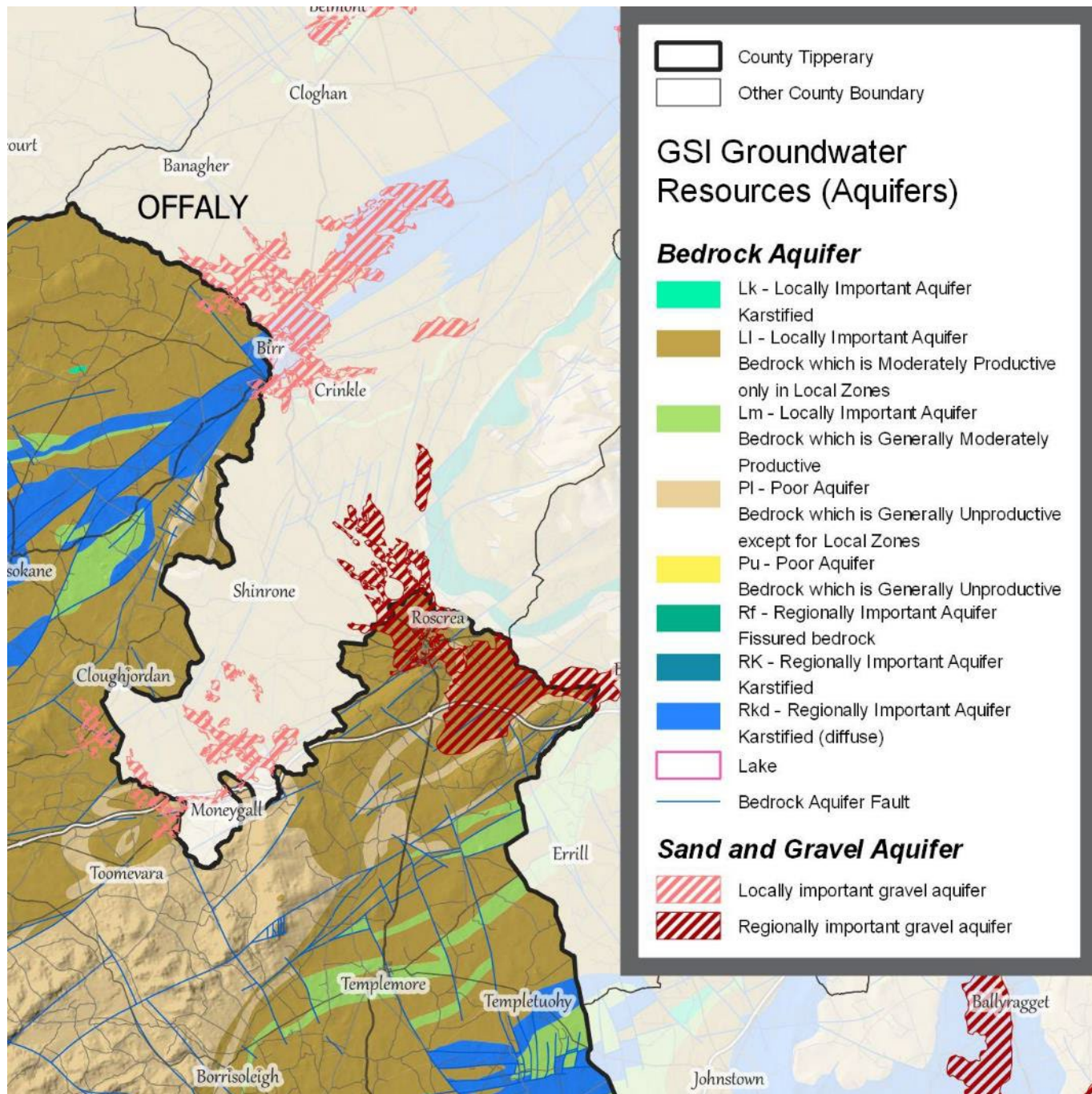


Figure 15 Groundwater Productivity (GSI)

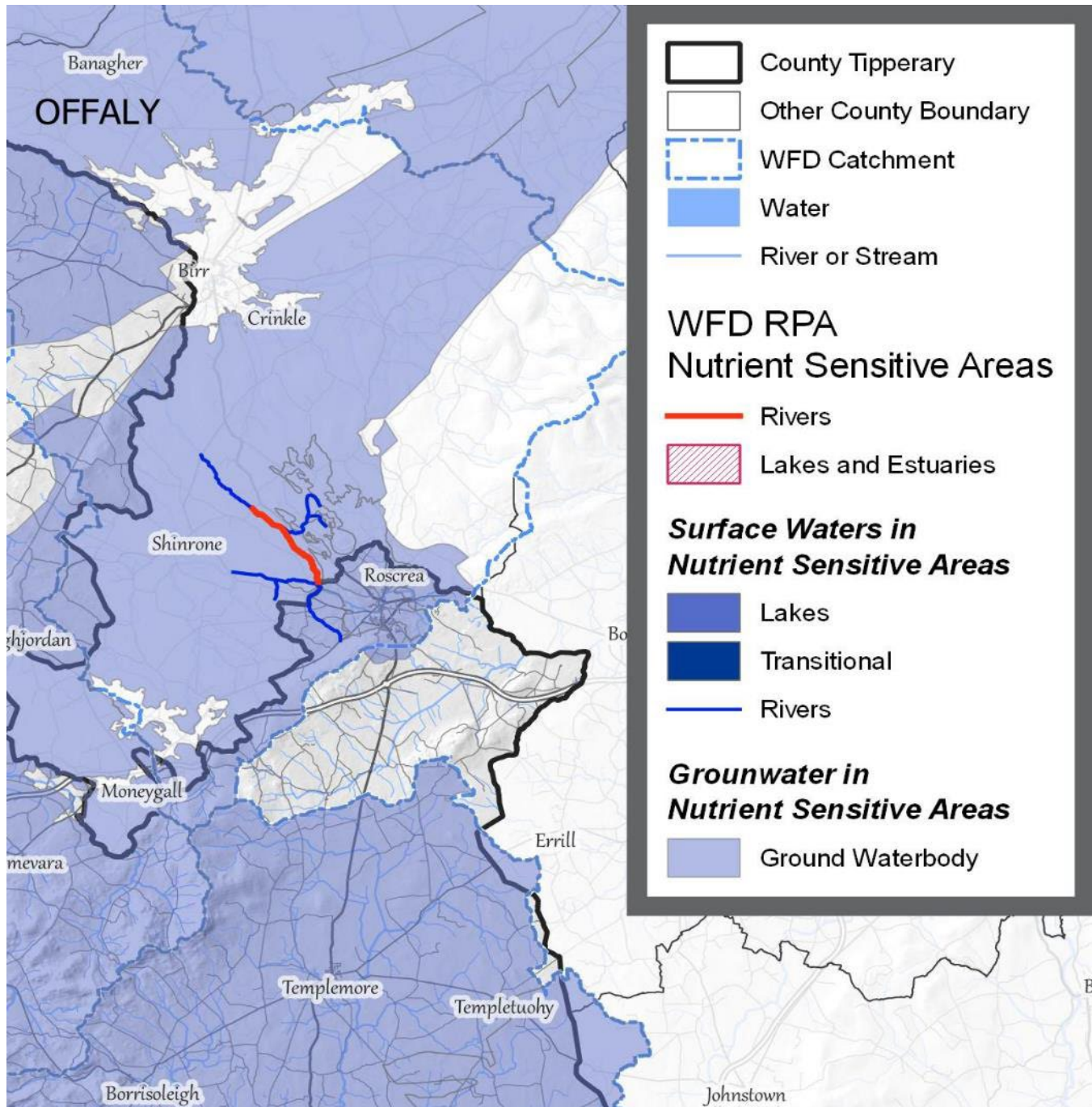
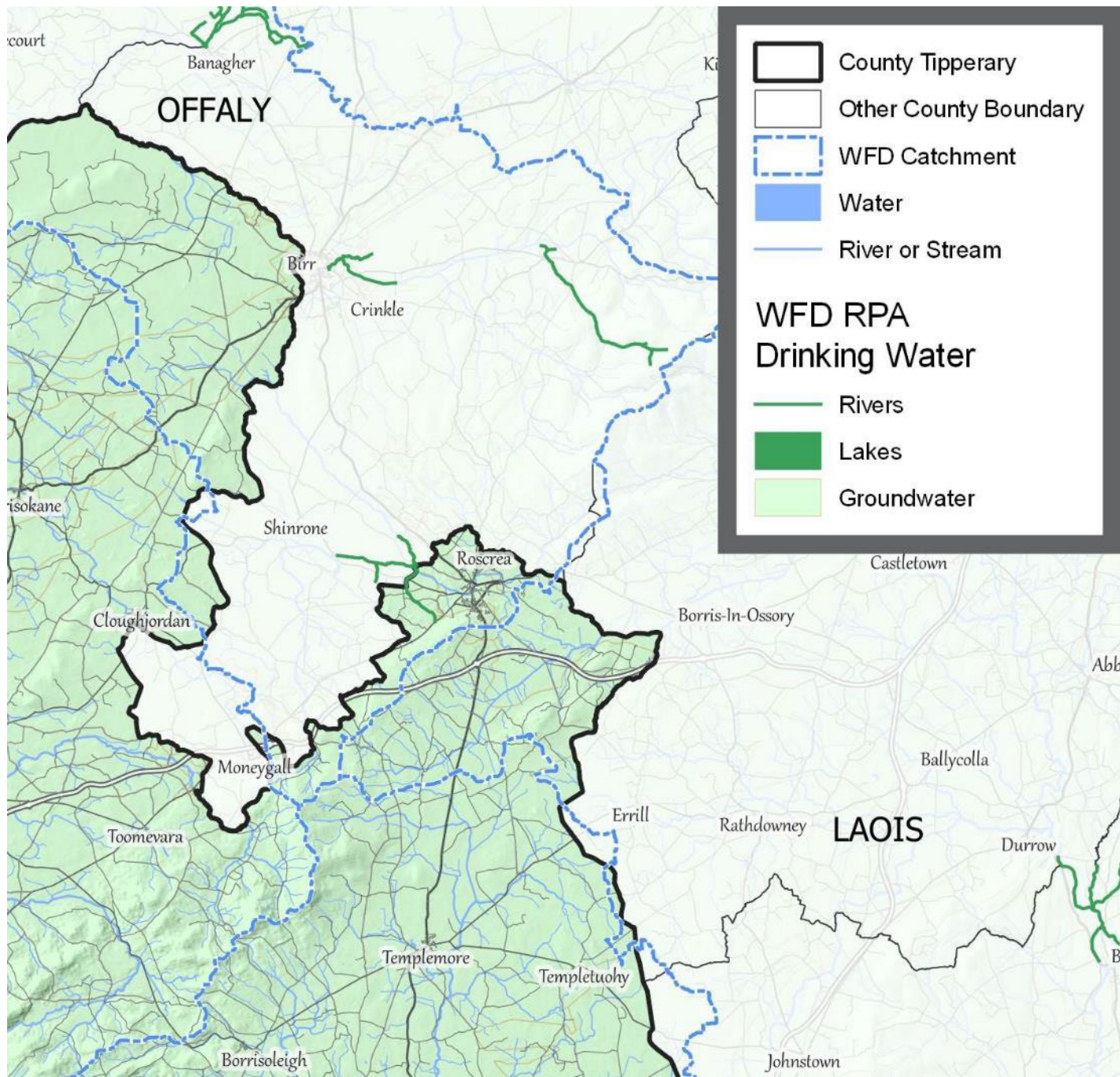


Figure 16 WFD Register of Protected Areas: Nutrient Sensitive Areas



**Figure 17 WFD Register of Protected Areas: Drinking Water**



Figure 18 OPW Preliminary Flood Risk Assessment (PFRA) Mapping

## 4.10 Air and Climatic Factors

### 4.10.1 Introduction

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>1</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.

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 Action

The National Climate Action Plan 2023 (the second annual update to Ireland's Climate Action 2019) 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 net-zero emissions by no later than 2050, as committed to in the Programme for Government and set out in the Climate Act 2021. The Plan (a supplementary Annex of Actions to the 2023 Plan will be published early in 2023) 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 periodically, to ensure alignment with legally binding economy-wide carbon budgets and sectoral ceilings.

Climate mitigation describes 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 use of alternative fuels, including electricity, forms a significant part of government policy to reduce emissions, including from transport. Greater use of alternative fuels, including renewable energy, has the potential to further contribute towards energy security.

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 Tipperary County Council Climate Change Adaptation Strategy 2019-2024 and the Tipperary County Development Plan 2022 set out a pathway for a low-carbon society. For towns the key focus is on compact development, regeneration and active travel.

### 4.10.3 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, 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. The current<sup>26</sup> air quality within the LAP is identified by the EPA as being *good*.

### 4.10.4 Noise

Tipperary County Council has prepared a Noise Action Plan 2018-2023 in accordance with the requirements of the Environmental Noise Regulations 2006. 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 to environmental noise. Roscrea is not identified as an area of elevated noise levels.

### 4.10.5 Existing Problems

Legislative objectives governing air and climatic factors in County Tipperary or locally

<sup>26</sup> 26/05/2021 (<http://www.epa.ie/air/quality/>)

in Roscrea were not identified as being conflicted with.

## 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; settlements; resources such as public open spaces, parks and recreational areas; public buildings and services; transport and utility infrastructure (electricity, gas, telecommunications, water supply, wastewater infrastructure etc.); forestry; and natural resources that are covered under other topics such as water and soil.

### 4.11.2 Green Infrastructure

Parks and open space promote health and well-being, provide recreational facilities and range of habitats for various species. Green infrastructure 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.

### 4.11.3 Land

The Plan seeks 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.

### 4.11.4 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 town's green infrastructure network.

### 4.11.5 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. Peat soils are often indicative of areas that are the most sensitive to development due to ecological sensitivities and impeded drainage issues; various peatland areas are subject to ecological designations (see Section 4.6). There are no peatlands in the plan area, however, there is an area of peatlands to the south near Sean Ross Abbey.

### 4.11.6 Renewable Energy Potential

Under EU Directive 2001/77/EC Renewable Energy, renewable energy sources are defined as renewable non-fossil energy sources such as, but not limited to wind, solar, geothermal, wave, tidal, hydropower, biomass, landfill gas, sewage treatment plant gas, bio-gases and bio-char (i.e. the thermal treatment of natural organic materials in an oxygen-limited environment).

Tipperary Renewable Energy Strategy 2016 is the foundation of the renewable energy planning policy for the County and its towns and will be maintained and updated over time lifetime of the Plan.

### 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 the plan area are shown on Figure 19. 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;
- GeoUrban Bedrock;
- Quaternary and Physiographic mapping;

- 3D Quaternary Models;
- National Aquifer and Recharge mapping; and
- Geochemistry and Geophysical datasets.

### 4.11.8 Transport

Transport infrastructure has the potential to support reductions in energy demand from the transport sector, including through electrification of modes.

The town is well served by public transport and road links. The M7 is located to the south of the Plan area and the N62 travels through the town in a north to south direction. Irish Rail operate along the interregional rail lines: Limerick – Ballybrophy and the train station is located to the north of the town centre.

There are a number of public and private bus operators providing services to the town including Bus Éireann and local link.

### 4.11.9 Water Services

#### 4.11.9.1 Wastewater

Irish Water is responsible for the collection, treatment and disposal of public wastewater and have carried out a Drainage Area Plan (DAP) for the town incorporating a Wastewater Infrastructure Plan for future investment. The Roscrea Wastewater Treatment Plant, has a high design capacity, with a current (2020) load of 6,773 (PE)<sup>27</sup>. Irish Water have indicated that there is capacity to cater for projected population growth in Roscrea, however, ongoing improvement works are required the town to ensure adequate separation of foul and surface water and to service of lands identified for development over the lifetime of this LAP in line with their DAP. Local network upgrades may be required some areas to provide capacity to individual sites. These will be customer driven/funded in accordance with the requirements of the Irish Water Connections Charging Policy.

Irish Water is responsible for the collection, treatment and disposal of public wastewater

and have carried out a Drainage Area Plan (DAP) for the town incorporating a Wastewater Infrastructure Plan for future investment. The Roscrea Wastewater Treatment Plant has a high design capacity, with a current (2020) load of 6,773 (PE)<sup>28</sup>. Irish Water have indicated that there is capacity to cater for projected population growth in Roscrea, however, they have indicated a need for ongoing improvement works in line with their DAP to ensure adequate separation of foul and surface water, and to service lands identified for development over the lifetime of the LAP. Local network upgrades may be required in some areas to provide capacity to individual sites.

The plant meets the standards of the Urban WTP standards, with (Emission Limit Value (ELV) compliance and new development to be considered by the planning authority on a case by case basis.

The EPA produces annual reports on the treatment of urban wastewater from cities, towns and urban communities. The latest list (EPA, December 2021) identifies the priority areas where resources must be targeted, in order to protect the environment from the harmful effects of wastewater, and deliver environmental improvements where they are most needed. Based on the EPA's assessment of monitoring information provided by Irish Water and the enforcement activities carried out by the EPA, this list identifies urban areas with the most important environmental issues that must be addressed. Roscrea is currently not included on that list.<sup>29</sup>

Irish Water is responsible for the treatment and disposal of the sludge that is generated from both its water and wastewater treatment plants. Irish Water has prepared a National Wastewater Sludge Management Plan 2016-2021 that outlines Irish Water's strategy to ensure a nationwide standardised approach for managing wastewater sludge over a 25-year period. A separate plan will be prepared in relation to sludge produced at drinking water plants.

27 Irish Water for Tipperary 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.

28 Irish Water for Tipperary 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.

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



#### 4.11.9.2 Water Supply

The town is supplied from the Roscrea Regional Water Supply Scheme in the Eastern and Midlands Region. The Roscrea Regional Water Supply Scheme produces approximately 2,269 m<sup>3</sup>/day of water serving a population of 6,112, supplied by Niamh's Well, Shinrone, Roscrea and Glenbeha water treatment plants<sup>30</sup>. Irish Water have indicated that there is capacity to cater for projected population growth from the Roscrea Water Resource zone. Monitoring is carried out by the EPA and the water supply currently meets all relevant water quality standards.

Irish Water and Tipperary County Council regulates and administers subsidies for Group Water Schemes.<sup>31</sup> Roscrea is the Water Resource Zone (WRZ)<sup>32</sup> ID 2900SC0002 serving the Plan area with capacity available as indicated by Irish Water.<sup>33</sup> A Groundwater Protection Scheme has been carried out for the County. There are some Source Protection Areas to the west and south west of the Plan area but none within or near to its boundary.

Under Section 58 of the EPA Act 1992 the EPA is required to collect and verify monitoring results for all water supplies in Ireland covered by the European Communities (Drinking Water) Regulations, 2000. The EPA publishes their results in annual reports which are supported by Remedial Action Lists (RALs). These lists identify water supplies that are not in compliance with the Drinking Water Regulations. Water quality and management of nutrients from sources such as agriculture, municipal wastewater treatment plants and on-site wastewater treatment systems will be also considered by the SEA. As of Q2 2022, there are 57 supplies on the list. The drinking water facility for Roscrea is not listed on the current RAL (Q2 of 2022).

Tipperary County Council will work alongside and facilitate the delivery of Irish Water's Water Investment Plan to support and facilitate the delivery of new or improved wastewater treatment plants in the town.

#### 4.11.9.3 Surface Water Drainage

Sustainable Urban Drainage systems (SUDS) can minimise the quantity and increase the quality of surface water runoff as well as mitigating 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 and in particular nature-based solutions (in line with the Tipperary County Development Plan 2022 – 2028).

#### 4.11.10 Waste Management

Waste management within the Plan area is guided by the Southern Waste Management Plan 2015-2021. The Plan provides a framework for the prevention and management of waste in a sustainable manner in ten local authority areas, including that of Tipperary's County Council's. The closest municipal landfill site is Ballaghveny, Tipperary and there is a municipal Recycling Centre/Civic Amenity Site located in the town at the Dublin Road. There are approximately 135 Bring Banks in Tipperary with 4 of these located in Roscrea at the Garda Station, Civic Amenity site, Kennedy Park and St Anne's school. Tipperary has 80 clothes/textile receptacles at bring bank locations which are owned and managed by the local authority, two of these are located in Roscrea.

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 Southern Regional Waste Management Plan 2015-2021 lists sites in County Tipperary.

#### 4.11.11 Existing Problems

The Water Services Section of Tipperary County Council will co-operate with Irish Water in providing and maintaining adequate public water supply and wastewater collection and treatment infrastructure throughout the town for the period of the plan and beyond.

30 Regional Water Resources Plan: Eastern and Midlands (Irish Water December 2022)

31 Tipperary CDP 2022-2028

32 Irish Water for Tipperary County Council (March 2022), 10-Year Water Supply Capacity Register: A WRZ is an independent water supply system serving a region, city,

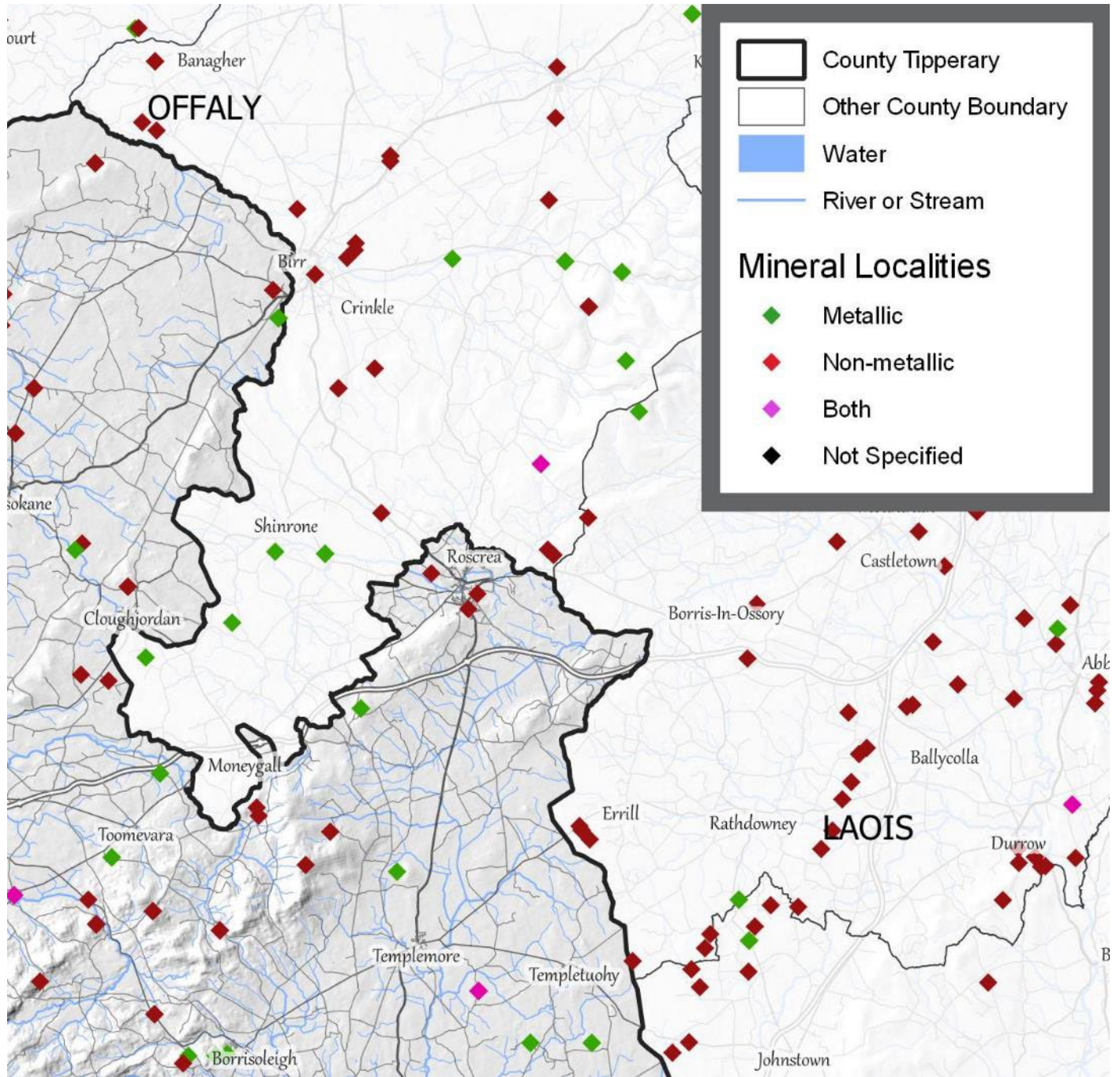
town or village and is governed by topography or the extent of the water distribution network in an area. A WRZ may include multiple Water Treatment Plants and/ or sources.

33 Irish Water for Tipperary County Council (March 2022), 10-Year Water Supply Capacity Register:

The Council and Irish Water are responsible for drainage having consideration to Water Sensitive Urban Design and application of a nature-based Sustainable Urban Drainage Systems (SUDS) approach. It is the policy of Irish Water to maximise the capacity of existing collection systems for foul water. The removal of stormwater from combined sewers as part of roads, public realm, residential or other developments will need to be ensured.

In conjunction with Irish Water, the Water Services Section of Tipperary County Council will endeavour to ensure the continued investment in and delivery of improvements to water infrastructure over the Plan period through the implementation of the Capital Investment Plan.

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



**Figure 19 Minerals Localities**



### Settlements with Waste Water Discharge Authorisations - Wastewater Treatment Capacity

Waste Water Discharge Licences (WWDL) and Certificates of Authorisation (CoA)

Mar-22

Region	County	Settlement	Census pop. (2016)	Wastewater Treatment Plant (WWTP)	Reg #	Serves other areas?	WWTP Capacity (PE)		Load (PE) 2020	Headroom (PE)		Current project completion year
							Today	Upon works completion		WWDL ELV Capability	UWW Standards Capability (not WWDL ELVs)	
S	Tipperary	Clonmel	17,140	Clonmel WWTP	D0035	No	80,000	=	30,354	49,646		
S	Tipperary	Nenagh	8,968	Nenagh New WWTP	D0027	No	11,000	19,800	11,298	-	4,002	2026
S	Tipperary	Thurles	7,940	Thurles WWTP	D0026	No	15,000	=	10,553	4,447		
S	Tipperary	Carrick-on-Suir	5,771	Carrick-On-Suir WWTP	D0148	No	11,000	=	7,340	3,660		
S	Tipperary	Roscrea	5,446	Roscrea WWTP	D0025	No	26,000	=	6,773	-	19,227	
S	Tipperary	Tipperary	4,979	Tipperary Town WWTP	D0146	No	9,800	8,000	9,725	-	75	Post 2024
S	Tipperary	Cashel	4,422	Cashel WWTP	D0171	No	7,000	7,900	5,059	-	1,941	Post 2024

**Headroom (PE)** WWDL Capability UWW Standards Capability (not WWDL ELVs) Amber = potential spare capacity. WWTP currently not compliant with Waste Water Discharge Licence emission limit values but is capable of achieving at least UWW standards. Potential availability of capacity in this case would be dependent on any additional load not resulting in a significant breach of the combined approach as set out in Regulation 43 of the Waste Water Discharge (Authorisation) Regulations 2007.



### 10-Year Water Supply Capacity Register

Published April 2022

Region	Local Authority	Settlement Name	Settlement Population (CSO 2016)	Target Settlement Population 2031	Water Resource Zone Name (WRZ)	WRZ ID	Indication of capacity available to support 2031 population targets
S	Tipperary	Clonmel	17,140	22,282	Clonmel & Enviorns	2900SC0025	Capacity Available - Level of service (LoS) improvement required
S	Tipperary	Nenagh	8,968	11,658	Nenagh	2900SC0050	Capacity Available - Level of service (LoS) improvement required
S	Tipperary	Thurles	7,940	10,322	Thurles / Borrisoleigh	2900SC0014	Capacity Available - Level of service (LoS) improvement required
S	Tipperary	Carrick-on-Suir	5,771	6,637	Carrick-On-Suir	2900SC0024	Potential Capacity Available - Level of service (LoS) improvement required
S	Tipperary	Roscrea	5,446	6,263	Roscrea	2900SC0002	Capacity Available

Capacity Available to meet 2031 population targets.

## 4.12 Cultural Heritage

### 4.12.1 Archaeological Heritage

Archaeological heritage is protected under various legislation including the National Monuments Acts (1930-2004), Natural Cultural Institutions Act 1997 and the Planning Acts. The SEA Environmental Report will include information on the archaeological heritage of Roscrea, including that relating to designations such as entries to the Record of Monuments and Places (RMP).

There are various entries to the RMP within and around Roscrea (Sheet No. 12 Archaeology RMP Tipperary NR), including:

- 10—(Town - the concentration of monuments in the Central Area including Townparks, Castleholding, Demesne, Parkmore, Glebe)),
- 13 (Watermill Possible Site – a cluster to the northwest of town at Clybanane),
- 12 (Architectural fragment at Birchgrove (Corbally)), and,
- 14 (Abbey – Sean Ross Corville).

There are numerous sites and monuments found within the town's various Zones of Archaeological Potential.<sup>34</sup>

Figure 20 shows the spatial distribution of recorded monuments across the plan area and wider region<sup>35</sup>.

The Underwater Archaeology Unit was 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 heritage. Archaeological objects found underwater are protected under the National Monuments.

### 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>36</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 Record of Protected Structures included in the Tipperary County Development Plan– 2022 - 2028 is legislated for under Section 12 and Section 51 of the Planning and Development Act 2000 (as amended). Protected Structures are defined 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.

There are a number of Protected Structures within and surrounding the Plan area, many of these Protected Structures are located within central parts of Roscrea town.

An Architectural Conservation Area (ACA) is a place, area, group of structures or townscape, which is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or contributes to the appreciation of a Protected Structure. An ACA may or may not include Protected Structures. In an ACA, protection is placed on the external appearance of such areas or structures. There are four designated ACAs in the Plan area, namely:

<sup>34</sup> Roscrea Town LAP 2013

<sup>35</sup> Archaeological monuments in the neighboring counties and monuments, which straddle County Tipperary boundaries have been also considered by the assessment.

<sup>36</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.

- Main Street ACA,
- Rosemary Street & Square ACA,
- Burgoo ACA (Limerick Street), and,
- Bunkers Hill ACA.

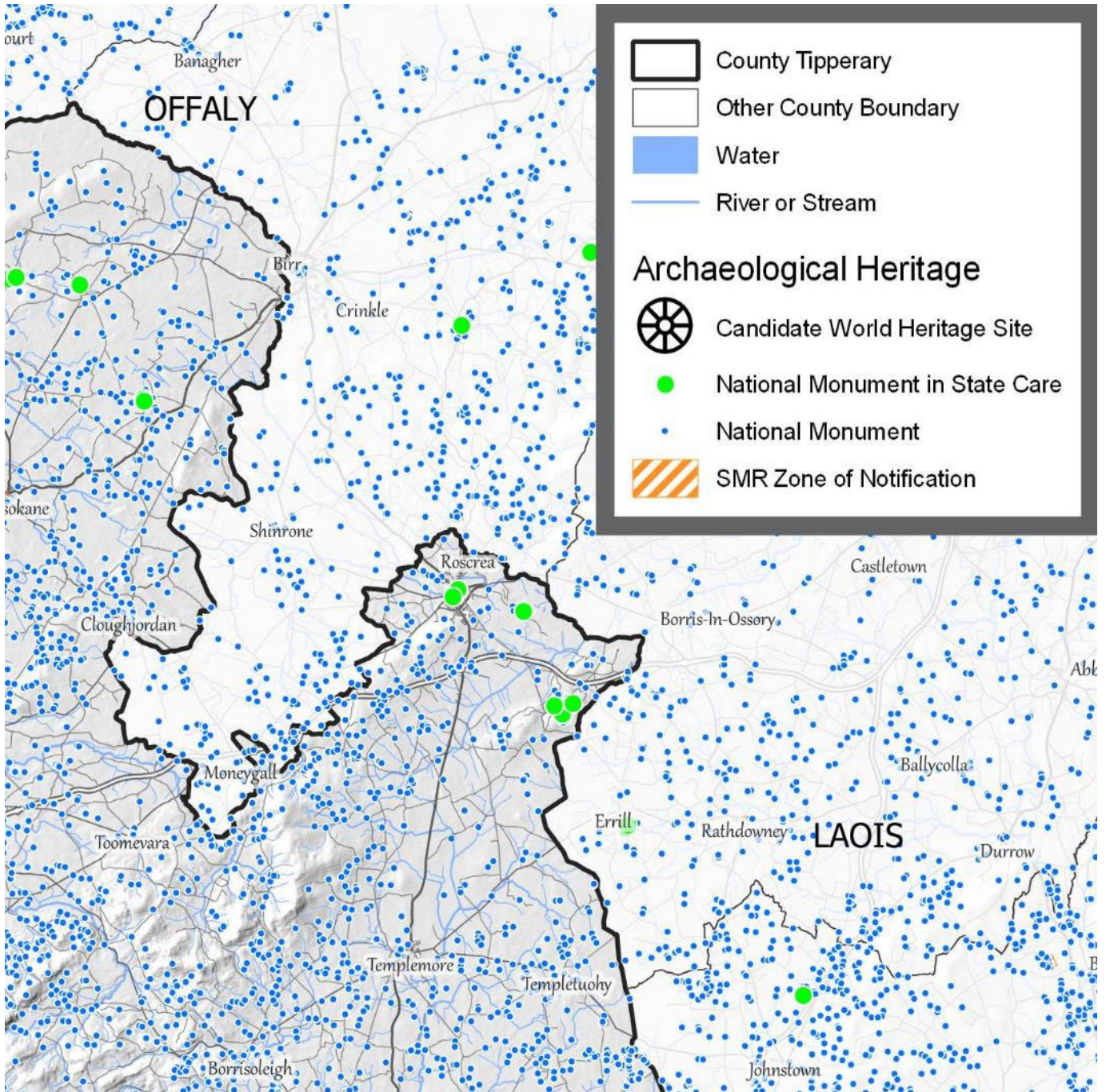
The National Inventory of Architectural Heritage (NIAH) is a State initiative under the administration of the Department of Housing Local Government and Heritage and was established on a statutory basis under the provisions of the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous 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 Housing Local Government and Heritage to the local authorities for the inclusion of particular structures in their Record of Protected Structures. The NIAH includes historic gardens and designed landscapes.

### **Sean Ross Abbey**

Sean Ross Abbey located to the south east of the town in a rural area south of the N62, and is a former mother and baby home and religious complex. The entire area is defined by scenic farmland within which the former convent and abbey and various institutional buildings and cemeteries are located. The abbey itself is an entry to the RMP (Sheet No. 12 Archaeology RMP Tipperary NR),<sup>14</sup> (Abbey – Sean Ross Corville). The site has a social and cultural importance to the town as a result of its history. Sean Ross Abbey, its future uses and the protection of social and cultural as well as archaeological heritage is addressed in the Roscrea LAP.

### **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. The plan complies with the policies and objectives of the Tipperary County Development Plan 2022 – 2028 and also sets out local objectives and policies.



**Figure 20 Archaeological Heritage**

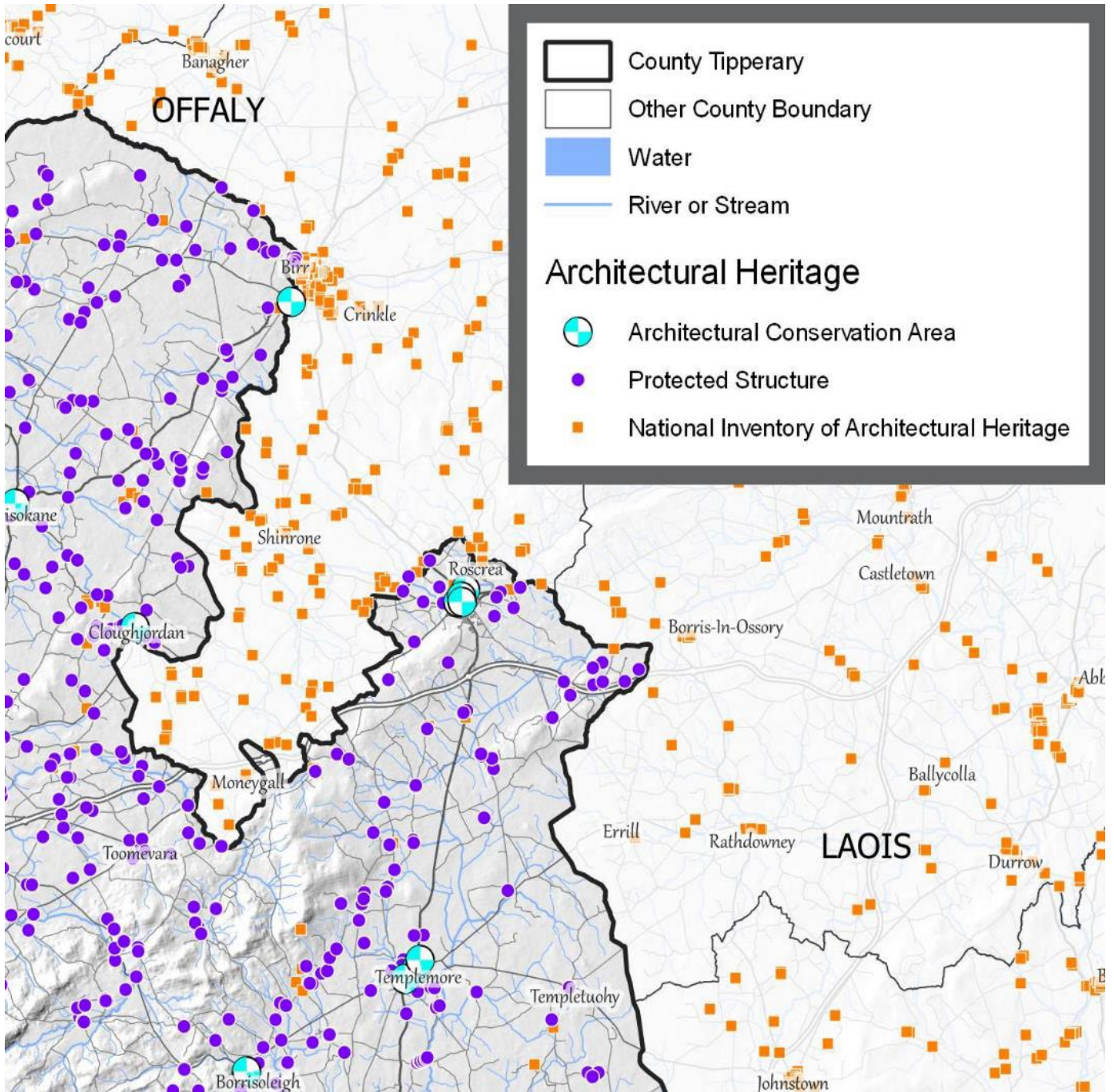


Figure 21 Architectural Heritage



## 4.13 Landscape and Views

### 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.

The amenities of the town consist of the built environment including historical streetscape and riverside character, while most of the area surrounding Roscrea consists of agricultural and pasture lands. Roscrea has strong links with St. Cronan who originally founded his monastery at Sean Ros outside the current town of Roscrea. Roscrea has been designated as one of Ireland's Heritage Towns and stands on the ancient road from Tara to Cashel. Close by is Monaincha Abbey which was once Munster's most famous place of pilgrimage.

The Tipperary LCA (Tipperary CDP 2022-2028) states that the town of Roscrea remains an important nucleus within the County, providing a number of key services to the surrounding area. The name comes from Ros Cre, or the Wood of Cre. Cre was the wife of Dala, after whom the Sli Dala was named. The Sli Dala is an ancient route, one of five that emanated from Tara. The current N7 still largely follows this alignment. The town has strong links with St. Cronan who originally founded his monastery at Sean Ros outside the current town of Roscrea. However, it proved difficult to access this site so St. Cronan relocated to a new site along the Sli Dala and this is where the town developed from. The Book of Dimma, a copy of the Four Gospels was said to have been written in the monastery in the eight century.

### 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.

The Tipperary County Council Landscape Character Assessment identifies four Universal Landscape Archetypes, including 'The Plains':

#### A. The Plains

- A1. Lowland Pasture and Arable
  1. Urban and Fringe Areas
  2. Thurles Hinterland
  3. Nenagh Corridor
  4. River Suir Central Plain /Nenagh Corridor
- 5. **Templemore Plains**
  6. West Tipperary Farmland Mosaic
- A2. Peatlands and Wet Mixed Farmland
  7. Borrisokane Lowlands
  8. Littleton Raised Bog
  9. Littleton Farmland Mosaic and Marginal Peatland

Roscrea is located in the 'Tipperary Plains' and in the 'Templemore Plains'. The LCA also recognises the urban landscape character of the town. There is no landscape amenity sensitivity designation associated with the area (the closest being the Devils Bit mountains – area of secondary amenity) and there are no listed routes or views associated with the Plan area (the closest being V58 Views west on the N62 north of Templemore). There are 15 Protected Views set out in the current LAP for the Town

### 4.13.3 Other Landscape Designations

The County Development Plan encompasses many sites and vantage points from which views over areas of great natural beauty, local landmarks, historic landscapes, adjoining counties may be obtained. The Tipperary Landscape Character Assessment identifies 63 **Scenic Routes and Views** within the County. These are listed in Appendix II. **Primary and Secondary Amenity Areas.** There is no county level sensitive landscape designation applicable to Roscrea.

#### 4.13.4 Landscape Designations in Adjacent Counties

County Laois borders County Tipperary to the north-east. The County Laois Landscape Character Assessment has identified the following seven Landscape Character Areas: Hills and Upland Areas; Lowland Agricultural Areas; River Corridors and Lakes; Mountain Areas; Peatland Areas; Urban Fringe Areas; and Rolling Hill Areas. Landscape designations within County Laois also include Views and Prospects. The Laois LCA designations are broadly in line with the Tipperary LCA for the areas around Roscrea, there are no special sensitivity landscapes in the area or views to and from Laois that would be affected having consideration to the location of the town.

County Offaly borders County Tipperary to the north. Landscape Character Areas within County Offaly include: Rural and Agricultural Areas; Cutaway Bog; The River Shannon and Callows; The Grand Canal Corridor; Wetlands; Slieve Bloom Upland Area; Croghan Hill and its Environs; Bogland Areas; The Esker Landscape; and Archaeological and Historical Landscapes. These areas are also the most sensitive to development within the County. Landscape designations within County Offaly also include Areas of High Amenity, Protected View Points and Amenity Value Roads. The Offaly LCA designations are broadly in line with the Tipperary LCA for the areas around Roscrea, there are no special sensitivity landscapes in the area or views to and from Offaly that would be affected having consideration to the location of the town.

#### 4.13.5 Views

The following views and streetscapes have been identified in the Plan area

- 1) Views into and out of the ACAs.
- 2) View from Main Street towards Round Tower
- 3) View from Castle Street towards St. Cronan's Church
- 4) View from Main Street down Castle Street
- 5) View from The Mall towards Sacred Heart Convent
- 6) View from Carroll's Row towards Franciscan Friary
- 7) View of Damer House from The Mall

- 8) View of Roscrea Castle from Rosemount
- 9) View of Damer House from Goal Road
- 10) View of Damer House from The Mall
- 11) View of Glebe House from The Mall
- 12) View of St. Cronan's Church from Carroll's Row
- 13) View of The Malting from Ballyhall
- 14) View of the Malting from The Mall
- 15) View looking up Abbey Street
- 16) View looking up Church Street towards St. Cronan's Church

#### 4.13.6 Existing Environmental Problems

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

#### 4.14 Summary of Key Environmental Sensitivities

The key Sensitivities occurring within the Plan area include:

- Archaeological
- Architectural
- Water Quality
- River Ecology
- Flood Risk
- Social and cultural heritage

These are indicated in this report and summarised in the Non-Technical Summary attached.

## 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 RSES and the Tipperary County Development Plan– 2022 - 2028, the measures identified in the RSES SEAs, including the Southern RSES SEA and CDP 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 5.1 Strategic Environmental Objectives (SEOs), Indicators and Targets from the Tipperary County Development Plan 2022 -2028**

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives (as set out in the Tipperary County Development Plan 2022 – 2028 as the strategic policy under with which this LAP must comply)	Indicators (as set out in the Tipperary County Development Plan 2022 – 2028 as the strategic policy under with which this LAP must comply)	Targets (as set out in the Tipperary County Development Plan 2022 – 2028 as the strategic policy under with which this LAP must comply)
<b>Biodiversity, Flora and Fauna</b>	<b>BFF</b>	No net contribution to biodiversity losses or deterioration	<ul style="list-style-type: none"> <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 Action Plan and its targets</li> <li>To protect, maintain and conserve natural capital</li> </ul>	<ul style="list-style-type: none"> <li>Condition of European sites</li> </ul>	<ul style="list-style-type: none"> <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 Tipperary Heritage Plan 2017-2021, and any superseding version of same</li> </ul>
				<ul style="list-style-type: none"> <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 (focus on nature-based solutions to surface water management)</li> </ul>	<ul style="list-style-type: none"> <li>Require local level land use plans/projects 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 Tipperary Heritage Plan 2017-2021, and any superseding version of same</li> </ul>
				<ul style="list-style-type: none"> <li>SEAs and AAs as relevant for new Council policies, plans, programmes etc.</li> </ul>	<ul style="list-style-type: none"> <li>Screen for and undertake SEA and AA as relevant for new Council policies, plans, programmes etc.</li> </ul>
				<ul style="list-style-type: none"> <li>Status of water quality in the town's water bodies</li> </ul>	<ul style="list-style-type: none"> <li>Included under Water below</li> </ul>
				<ul style="list-style-type: none"> <li>Compliance of planning permissions with Plan measures providing for the protection of Biodiversity and flora and heritage</li> </ul>	<ul style="list-style-type: none"> <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 Chapter 11 "Environment and Natural Heritage" of the CDP and Section 7 of the Roscrea LAP.</li> </ul>
<b>Population and Human Health</b>	<b>PHH</b>	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 style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>Implementation of Plan measures relating to the promotion of economic growth as provided for by Chapter 8 "Enterprise and Rural Development" of the CDP and Section 4 of the Roscrea LAP.</li> </ul>	<ul style="list-style-type: none"> <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 Chapter 8 "Enterprise and Rural Employment" and Section 4 of the Roscrea LAP</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 (Also relevant to Material Assets)</li> </ul>
				<ul style="list-style-type: none"> <li>Number of spatial concentrations of health problems arising from environmental factors resulting from development permitted under the Plan</li> </ul>	<ul style="list-style-type: none"> <li>No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan</li> </ul>
				<ul style="list-style-type: none"> <li>Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures</li> </ul>	<ul style="list-style-type: none"> <li>Increase in the proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures</li> </ul>

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives (as set out in the Tipperary County Development Plan 2022 – 2028 as the strategic policy under with which this LAP must comply)	Indicators (as set out in the Tipperary County Development Plan 2022 – 2028 as the strategic policy under with which this LAP must comply)	Targets (as set out in the Tipperary County Development Plan 2022 – 2028 as the strategic policy under with which this LAP must comply)
				<ul style="list-style-type: none"> <li>Number of spatial plans/projects that include specific green infrastructure mapping</li> </ul>	<ul style="list-style-type: none"> <li>Require all local level land use plans to include specific green infrastructure mapping</li> </ul>
<b>Soil (and Land)</b>	<b>S</b>	Ensure the long-term sustainable management of land	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>Proportion of population growth occurring on infill and brownfield lands compared to greenfield (also relevant to Material Assets)</li> </ul>	<ul style="list-style-type: none"> <li>Maintain built surface cover nationally to below the EU average of 4% as per the NPF</li> <li>In accordance with National Policy Objectives 3c of the National Planning Framework, a minimum of 30% of the housing growth targeted in any settlement is to be delivered within the existing built-up footprint of the settlement</li> <li>To map brownfield, regeneration and infill land parcels in the town</li> </ul>
				<ul style="list-style-type: none"> <li>Instances where contaminated material generated from brownfield and infill must be disposed of</li> </ul>	<ul style="list-style-type: none"> <li>Dispose of contaminated material in compliance with EPA guidance and waste management requirements</li> </ul>
				<ul style="list-style-type: none"> <li>Environmental assessments and AAs as relevant for applications for brownfield and infill development prior to planning permission</li> </ul>	<ul style="list-style-type: none"> <li>Screen for and undertake environmental assessments and AA as relevant for applications for brownfield and infill development prior to planning permission</li> </ul>
<b>Water</b>	<b>W</b>	Protection, improvement and sustainable management of the water resource	<ul style="list-style-type: none"> <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 County growth targets in the context of existing and projected water supply and wastewater 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 nature-based SuDS, porous surfacing and green roofs) into development proposals</li> </ul>	<ul style="list-style-type: none"> <li>Status of water bodies as reported by the EPA Water Monitoring Programme for the WFD</li> </ul>	<ul style="list-style-type: none"> <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 River Basin Management Plan (and any review thereof)</li> </ul>
				<ul style="list-style-type: none"> <li>Number of incompatible developments permitted within flood risk areas</li> </ul>	<ul style="list-style-type: none"> <li>Minimise developments granted permission on lands which – pose - or are likely to pose in the future - a significant flood risk.</li> </ul>
<b>Material Assets</b>	<b>MA</b>	Sustainable and efficient use of natural resources	<ul style="list-style-type: none"> <li>Optimise existing infrastructure and provide new infrastructure to match population distribution proposals - this includes transport infrastructure in the town</li> <li>Ensure access to affordable, reliable, sustainable and modern energy for all which encourages a broad energy generation mix appropriate to the town to ensure security of supply</li> <li>Promote the circular economy, reduce waste, and increase energy efficiencies</li> </ul>	<ul style="list-style-type: none"> <li>Programmed delivery of Irish Water infrastructure in line with Irish Water Investment Plan and prioritisation programme to ensure sustainable growth can be accommodated</li> <li>Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the Plan</li> </ul>	<ul style="list-style-type: none"> <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>Facilitate, as appropriate, Irish Water in developing water and wastewater infrastructure</li> </ul>

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives (as set out in the Tipperary County Development Plan 2022 – 2028 as the strategic policy under with which this LAP must comply)	Indicators (as set out in the Tipperary County Development Plan 2022 – 2028 as the strategic policy under with which this LAP must comply)	Targets (as set out in the Tipperary County Development Plan 2022 – 2028 as the strategic policy under with which this LAP must comply)
			<ul style="list-style-type: none"> <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 active travel, public transport and 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, towns and grids</li> </ul>	<ul style="list-style-type: none"> <li>• Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures</li> </ul>	<ul style="list-style-type: none"> <li>• See also targets relating to greenfield and brownfield development of land under Soil and broadband under Population and Human Health</li> <li>• Increase in the proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures</li> </ul>
<b>Air</b>	<b>A</b>	Support clean air policies that reduce the impact of air pollution on the environment and public health	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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>
<b>Climatic Factors</b> <sup>37</sup>	<b>C</b>	Achieving transition to a competitive, low carbon, climate-resilient economy that	<ul style="list-style-type: none"> <li>• To minimise emissions of greenhouse gasses</li> <li>• Integrate sustainable design solutions into the town's infrastructure (e.g. energy efficient buildings; green infrastructure)</li> <li>• Contribute towards the reduction of greenhouse gas emissions in line with national targets</li> </ul>	<ul style="list-style-type: none"> <li>• Implementation of Plan measures relating to climate change</li> <li>• A competitive, low-carbon, climate-resilient and environmentally sustainable economy</li> </ul>	<ul style="list-style-type: none"> <li>• For review of progress on implementing Plan objectives to demonstrate successful implementation of measures relating to climate reduction targets, including renewable energy production</li> <li>• Contribute towards transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050</li> </ul>

<sup>37</sup> Please also refer to relevant legislation and requirements under Section 4.10, Section 8.6, Section 9 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.

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives (as set out in the Tipperary County Development Plan 2022 – 2028 as the strategic policy under with which this LAP must comply)	Indicators (as set out in the Tipperary County Development Plan 2022 – 2028 as the strategic policy under with which this LAP must comply)	Targets (as set out in the Tipperary County Development Plan 2022 – 2028 as the strategic policy under with which this LAP must comply)
		is cognisant of environmental impacts	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Share of renewable energy in transport</li> </ul>	<ul style="list-style-type: none"> <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 facilitating the development of electricity charging and transmission infrastructure, in compliance with the provisions of the Plan</li> </ul>
				<ul style="list-style-type: none"> <li>Carbon dioxide (CO<sub>2</sub>) emissions across the electricity generation, built environment and transport sectors</li> </ul>	<ul style="list-style-type: none"> <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> </ul>
				<ul style="list-style-type: none"> <li>Energy consumption, the uptake of renewable options and solid fuels for residential heating</li> </ul>	<ul style="list-style-type: none"> <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>
				<ul style="list-style-type: none"> <li>Proportion of journeys made by private fossil fuel-based car compared to 2016 levels</li> </ul>	<ul style="list-style-type: none"> <li>Decrease in the proportion of journeys made by residents of the town using private fossil fuel-based car compared to 2016 levels</li> </ul>
				<ul style="list-style-type: none"> <li>Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures</li> </ul>	<ul style="list-style-type: none"> <li>Increase in the proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures</li> </ul>
<b>Cultural Heritage</b>	<b>CH</b>	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	<ul style="list-style-type: none"> <li>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 in accordance with the Plan</li> </ul>	<ul style="list-style-type: none"> <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> </ul>
				<ul style="list-style-type: none"> <li>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</li> </ul>	<ul style="list-style-type: none"> <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>
<b>Landscape</b>	<b>L</b>	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 style="list-style-type: none"> <li>Number of developments permitted that result in avoidable adverse visual impacts on the landscape, especially with regard to landscape designations, resulting from development which is granted permission under the Plan</li> </ul>	<ul style="list-style-type: none"> <li>Minimise the impact of developments permitted in the town which result in avoidable adverse visual impacts on the landscape, especially with regard to landscape designations, resulting from development which is granted permission under the Plan</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. Whether or not alternatives for the Plan are available has been identified by Tipperary County Council below. These alternatives are assessed in Section 7.

### 6.2 Limitations in Available Alternatives

The Plan is required to be prepared by 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 limited by the provisions of higher-level planning objectives, including those of the National Planning Framework (NPF) and the Regional Spatial and Economic Strategy (RSES) for the Southern Region. In particular, the **Tipperary County Development Plan 2022 – 2028** sets out a detailed spatial planning framework for the District Town of Roscrea, including population projection.

These documents set out various requirements for the content of the Plan including on topics such as settlement typology, land use zoning, modal shift targets and town centre and regeneration. The Tipperary County Development Plan 2022 sets out an objective for Tipperary and its towns to support a vision for a climate resilient and environmentally sustainable society and economy.

### 6.3 Type 1: Town Centre First Approach

The Tipperary County Development Plan 2022 requires new LAPs to embody a Town Centre First approach to planning and development. This Growth Model focuses development on the town centre, promoting the re-use of existing properties and the targeted re-development of infill and strategic brownfield site for residential, commercial, and community uses. This alternative growth model directly aligns with the National Planning Framework and the Southern Region and Spatial and Economic Strategy in terms of supporting compact growth development, sustainable land management and regeneration of town centres. The incorporation of a detailed Town Centre First framework can be done in two ways:

**Type 1 Alternative A:** This approach would strongly embody the principle of town centre first and compact development. The plan would designate the town centre as the primary growth area with 50% of new residential development to occur in the central area in the areas zoned for town centre. Key regeneration and consolidation sites would be identified. Further expansion on out-of-town greenfield lands that are not well linked with the town centre would not be permitted.

**Type 1 Alternative B:** This approach would embody and support the principles of Town Centre First and compact development, and would specify 'neighbourhoods' with unique characteristics and development criteria. In line with the NPF at least 30% of new residential development would be facilitated in the town centre area and there would be a general focus for new growth on the Compact Growth area of the town. Key regeneration sites would be identified as well as well-connected neighbourhood expansion opportunities. Complimentary 'edge-of-centre' new residential sites would support the development of additional options to meet the housing needs of the town and consolidate existing peripheral neighbourhoods. Further expansion on out-of-town greenfield lands that are not well linked with the town centre would not be permitted. Proportionate growth of employment and industry would also be supported adjacent to existing employment sites in the town.



## 6.4 Type 2: Serviced Land and Infrastructure Assessment Alternatives

### **Type 2 Alternative A: A Plan prepared using a Serviced Land and Infrastructure Assessment approach**

This alternative involves preparing the Plan using a Serviced Land and Infrastructure Assessment approach. It is noted that 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, however this tier of alternatives is being considered by the assessment in order to demonstrate its environmental benefits. Relevant sites will be identified that could contribute towards the population growth to be provided for. They will be comparatively assessed against infrastructural requirements (relating to water supply and waste water) and planning issues (relating to compact growth, public transport and co-ordinated development).

**Type 2 Alternative B: A Plan prepared not using a Serviced Land and Infrastructure Assessment approach** This alternative involves preparing the Plan while not using the Serviced Land and Infrastructure Assessment approach, thereby weakening the level of background information of available infrastructure and services for lands in the Plan area. Lands would be identified for development based on criteria including current zoning type, planning history, visual inspection etc.

## 6.3 Type 3: Growth Pattern Alternatives

### **Type 3 Alternative A: Town to be defined by outer ring road extent to the North**

The current LAP seeks to define the northern boundary of the town with a proposal for a new outer ring road to divert traffic on the N62. If delivered this would offer an alternative route for traffic travelling in a south to north direction along the N62, however, it would also facilitate green field and dispersed development away from the town centre. This approach would also conflict with the National Climate Action Plan 2023 which seeks to use existing transport infrastructure rather than delivering additional infrastructure unless identified in strategic higher level plans.

### **Type 3 Alternative B: Town centre consolidation and linking of residential neighbourhood south of N62**

This model of growth would promote the development of the town centre, and consolidate neighbourhoods of residential development to the south of the town beyond the N62 in line with patterns of development that have occurred in recent years. The enhanced connectivity of these areas by investment in an active travel and public transport network would be critical. This pattern of development would limit further expansion southwards on greenfield sites, in favour of consolidation on the central area and adjoining neighbourhoods. This alternative seeks to remove the current objective to seek funding for an outer relief route to the north and west of the town, and as an alternative to seek sustainable and active travel investment throughout the town to enable a reduction in GHG emissions and reduce reliance on the private car for transport.

## Section 7 Evaluation of Alternatives

### 7.1 Introduction

This section provides a comparative evaluation of the likely significant environmental effects<sup>38</sup> of implementing the alternatives 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.

**Table 7.1 Strategic Environmental Objectives<sup>39</sup>**

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives
<b>Biodiversity, Flora and Fauna</b>	<b>BFF</b>	No net contribution to biodiversity losses or deterioration	<ul style="list-style-type: none"> <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 Action Plan and its targets</li> <li>To protect, maintain and conserve the town's natural capital</li> </ul>
<b>Population and Human Health</b>	<b>PHH</b>	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 style="list-style-type: none"> <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 and focus on the town Centre First approach to the consolidation of the Town.</li> <li>Safeguard the town's citizens from environment-related pressures and risks to health and well-being</li> </ul>
<b>Soil (and Land)</b>	<b>S</b>	Ensure the long-term sustainable management of land	<ul style="list-style-type: none"> <li>Protect soils against pollution, and prevent degradation of the soil resource</li> <li>Promote the sustainable use of infill, regeneration and brownfield sites over the use of greenfield sites</li> <li>Safeguard areas of prime agricultural land and designated geological sites</li> </ul>
<b>Water</b>	<b>W</b>	Protection, improvement and sustainable management of the water resource	<ul style="list-style-type: none"> <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 growth targets in the context of existing and projected water supply and wastewater 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>
	<b>MA</b>		

<sup>38</sup> These effects include secondary, cumulative (see also Section 8.2), synergistic, short, medium and long-term permanent and temporary, positive and negative effects.

<sup>39</sup> See also Section 5

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives
<b>Material Assets</b>		Sustainable and efficient use of natural resources	<ul style="list-style-type: none"> <li>• Optimise use of existing infrastructure and provide new infrastructure to match population distribution proposals - this includes transport infrastructure, noting the requirement for emphasis on the principles of 'Avoid, Shift, Improve'.</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 – wind, solar, hydro, biomass, energy from waste and traditional fossil fuels</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 active travel, public transport and modal shift</li> <li>• Reduce the average energy consumption per capita including promoting energy efficient buildings, retrofitting, smart- buildings, towns and grids</li> </ul>
<b>Air</b>	<b>A</b>	Support clean air policies that reduce the impact of air pollution on the environment and public health	<ul style="list-style-type: none"> <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>
<b>Climatic Factors</b>	<b>C</b>	Achieving transition to a competitive, low carbon, climate-resilient economy that is cognisant of environmental impacts	<ul style="list-style-type: none"> <li>• To minimise emissions of greenhouse gasses</li> <li>• Integrate sustainable design solutions into the town's 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, compact development and increased use of public transport and active travel.</li> </ul>
<b>Cultural Heritage</b>	<b>CH</b>	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
<b>Landscape</b>	<b>L</b>	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

## 7.3 Detailed Assessment of Alternatives

### 7.3.1 Effects Common to all Alternatives

Each of the alternatives would be part of a wider Plan envisaging – in compliance with the robust policy framework in place at national, regional and county level – sustainable development and compact growth in Tipperary generally (and as outlined in the higher Tier Tipperary County Development Plan 2022 -2028). As such, common environmental effects (as detailed on Table 7.2) would be present under Plans adopting each of the different alternatives, though to varying degrees.

**Table 7.2 Effects Common to Plans Adopting each of the Different Alternatives**

Environmental Component	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated
<b>Biodiversity and Flora and Fauna</b>	<ul style="list-style-type: none"> <li>Contribution towards protection of ecology (including designated sites, ecological connectivity, habitats) by facilitating development of lands 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 town and beyond.</li> </ul>	<p>Arising from both construction and operation of development and associated infrastructure:</p> <ul style="list-style-type: none"> <li>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;</li> <li>Habitat loss, fragmentation and deterioration, including patch size and edge effects; and</li> <li>Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species such as birds (e.g. swifts) and bats.</li> </ul>
<b>Population and Human Health</b>	<ul style="list-style-type: none"> <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 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 town and beyond.</li> <li>Contribution towards the protection of human health by facilitating development of lands 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 town and beyond.</li> </ul>	<ul style="list-style-type: none"> <li>Potential adverse effects arising from flood events.</li> <li>Potential interactions if effects arising from environmental vectors.</li> <li>Dispersed and haphazard development on peripheral sites resulting in over reliance on the private car for transport.</li> <li>Vacancy and dereliction in the town centre by virtue of the lack of focus on town centre first and regeneration.</li> </ul>
<b>Soil</b>	<ul style="list-style-type: none"> <li>Contribution towards the protection of soils (including those used for agriculture) and designated sites of geological heritage by facilitating development of lands 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 town and beyond.</li> </ul>	<ul style="list-style-type: none"> <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> <li>Lack of control on greenfield development would result in soil degradation.</li> </ul>
<b>Water</b>	<ul style="list-style-type: none"> <li>Contribution towards the protection of water by facilitating development of lands 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 town and beyond.</li> </ul>	<ul style="list-style-type: none"> <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>

Environmental Component	• Significant Positive Effect, likely to occur	• Potentially Significant Adverse Environmental Effects, if unmitigated
<b>Material Assets</b>	<ul style="list-style-type: none"> <li>• Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-served lands elsewhere in the town and beyond.</li> <li>• Contribution towards limits in increases in energy demand from the transport sector by facilitating sustainable compact growth.</li> </ul>	<ul style="list-style-type: none"> <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 agriculture and soil, water, biodiversity and human health - including phosphorous and nitrogen deposition as a result of agricultural activities and the production of secondary inorganic particulate matter.</li> </ul>
<b>Air and Climatic Factors</b>	<ul style="list-style-type: none"> <li>• Contribution towards climate mitigation and adaptation by facilitating compact development of lands that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-served lands elsewhere in the town and beyond.</li> </ul>	<ul style="list-style-type: none"> <li>• The population of the town would be unable to contribute meaningfully to individual climate action obligations as a sustainable plan and plan-led development would not be available to them.</li> <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>
<b>Cultural Heritage</b>	<ul style="list-style-type: none"> <li>• Contributes towards protection of cultural heritage elsewhere in the town by facilitating development within the town.</li> </ul>	<ul style="list-style-type: none"> <li>• Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities.</li> </ul>
<b>Landscape</b>	<ul style="list-style-type: none"> <li>• Contributes towards protection of wider landscape and landscape designations by facilitating development within the town.</li> </ul>	<ul style="list-style-type: none"> <li>• Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape.</li> </ul>

### 7.3.2 Assessment of Type 1: Town Centre First Approach

**Type 1 Alternative A:** This approach would very strongly embody the Governments principle of Town Centre First and compact development. The plan would designate the town centre as the primary growth area with at least 50% of new residential development to occur in the central area in the areas zoned for town centre, thereby strongly enabling active travel. Key regeneration sites would be identified and extension of the town into green field areas as well as consolidation of existing neighbourhoods would not be permitted.

However, the limiting of 50% of new housing development to existing town centre sites only, could result in the town not meeting its housing and accommodation targets in line with population projections. Opportunities to consolidate existing peripheral neighbourhoods and to provide better active travel linkages might not be availed of, and potential for services growth and employment growth on sites outside of the town centre area might be lost. In particular, this alternative could risk the further detachment of residential neighbourhoods to the south of the town beyond the N62 and the detachment of the rail station from the central area.

**Type 1 Alternative B:** This approach would also embody and support the principles of Town Centre First and compact development. In line with the NPF, at least 30% of new residential development would be facilitated in the town centre area and there would be a general focus for new growth on the Compact Growth area of the town. Key regeneration sites would be identified as well as well-connected 'neighbourhood' expansion opportunities, with plan-led approach to the development of neighbourhoods with appropriate density guidance. Complimentary 'edge-of-centre' new residential sites would support the developed of additional options to meet the housing needs of the town. Proportionate growth of employment and industry would also be supported adjacent to existing employment sites in the town.

**Selected Type 1 Alternative for the Plan: Alternative B.** Under Alternative B, the Plan enshrines a move to a low-carbon and climate resilient economy and society by incorporating the Town Centre First approach and also enabling growth in other 'Neighbourhoods' in line with sequential development and sustainable transport linkages and within a framework of active travel, efficient use of infrastructure and service provision. This alternative will strengthen the town centre and reduce pressure for expansion into greenfield out of town sites, whilst at the same time ensuring that the planned growth can be delivered.

Type 1 alternatives are assessed against Strategic Environmental Objectives on Table 7.3.

**Table 7.3 Assessment<sup>40</sup> of Type 1 Alternatives against Strategic Environmental Objectives**

Alternative	Likely to <b>Improve</b> status of SEOs		<b>Potential Conflict</b> with status of SEOs – likely to be mitigated	
	to a <b>Greater</b> degree	to a <b>Lesser</b> degree	to a <b>Lesser</b> degree	to a <b>Greater</b> degree
Under Type 1 Alternative A	Growth of the town centre is sustainable and where achieved to any extent would be sustainable. A, C, S, W, A, C, CH	Where the 50% population growth target in the central area, would be strongly underpinned by a TCF programme A, C, S, W, A, C, CH	Due to the risk that seeking 50% population growth in the central area, might actually result in the town not achieving its population targets BFF, PHH, S, W, CH	As a result of concentration of growth in the central area MA.
Under Type 1 Alternative B	A 30% growth increase in the central area is deemed achievable and will support a town centre first approach PHH, BFF, MA, CH	A 30% growth increase in the central area is deemed achievable and will support a town centre first approach PHH, BFF, MA, CH	As a result of concentration of growth in the central area MA.	As a result of concentration of growth in the central area MA.

**Type 1, Alternative B** demonstrates the greatest ability to improve the status of SEOs and is the alternative chosen in terms of appropriate approach to Town Centre First for Roscrea as a District Town.

<sup>40</sup> The alternatives are evaluated using compatibility criteria 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 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 result in a significant positive effect on the protection/management of the environmental component/issues to which the SEO relates.

Interactions that would potentially conflict with the status of an SEO and would be likely to be mitigated would be likely to result in a potential significant negative effect however these effects would be likely to be mitigated by measures which have been integrated into the Plan.

These effects include secondary, cumulative (see also Section 8.2), synergistic, short, medium and long-term permanent and temporary, positive and negative effects.

## Type 2: Serviced Land & Infrastructure Assessment Alternatives

### Type 2 Alternative A: A Plan prepared using a Serviced Land and Infrastructure

**Assessment approach** This alternative involves preparing the Plan using a Serviced Land and Infrastructure Assessment approach. It is noted that 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, however this tier of alternatives is being considered by the assessment in order to demonstrate its environmental benefits. Relevant sites were identified that could contribute towards the population growth to be provided for. They were comparatively assessed against infrastructural requirements (relating to water supply and waste water) and planning issues (relating to compact growth, public transport, walking and cycling distances from the centre and co-ordinated development). In line with the Core Strategy of the County Development Plan, lands have been de-zoned and re-zoned for 'Strategic Reserve' to bring land-zoning closer to the amount of land required to cater for population growth, whilst enabling a level of choice in terms of lands coming forward for development.

### Type 2 Alternative B: A Plan prepared not using a Serviced Land and Infrastructure

**Assessment approach** This alternative involves preparing the Plan while not using the Serviced Land and Infrastructure Assessment approach, thereby weakening the level of background information of available infrastructure and services for lands in the Plan area and leading to a haphazard approach to zoning largely based on zoning already in place in the current LAP. This approach would result in land-zoning far in excess of that required to accommodate new population growth and would result in a situation where targeted growth in central areas could not be achieved.

**Selected Type 2: Alternative for the Plan: Alternative A** Type 2 alternatives are assessed against Strategic Environmental Objectives on Table 7.3.

**Table 7.4 Assessment of Type 2 Alternatives against Strategic Environmental Objectives**

Alternative	Likely to <b>Improve</b> status of SEOs		<b>Potential Conflict</b> with status of SEOs – likely to be mitigated	
	to a <b>Greater</b> degree	to a <b>Lesser</b> degree	to a <b>Lesser</b> degree	to a <b>Greater</b> degree
Type 2 Alternative A	The application of a detailed assessment of infrastructure and services will result in sustainable land zoning BEF, PHH, S, W, MA, A, C, CH, L	The application of a detailed assessment of infrastructure and services will result in sustainable land zoning, unless services providers are slow to engage with process BEF, PHH, S, W, MA, A, C, CH, L	As a result of planned development of the town in line with services and infrastructure BEF, PHH, S, W, MA, A, C, CH, L	Where a poor application of a sequential approach to development is applied BEF, PHH, S, W, MA, A, C, CH, L
Type 2 Alternative B	Where investment and growth are slower than projected as a result of external forces BEF, PHH, S, W, MA, A, C, CH, L	Where existing infrastructure and services are relatively well provided for BEF, PHH, S, W, MA, A, C, CH, L	A lack of detailed assessment of services and infrastructure could be damaging for these SEOs BEF, PHH, S, W, MA, A, C, CH, L	As a result of development that would occur on less well connected, less well serviced areas BEF, PHH, S, W, MA, A, C, CH, L

**Type 2, Alternative A** demonstrates the greatest ability to improve the status of SEOs and is the alternative chosen in terms of appropriate approach to Serviced Land and Infrastructure assessment alternatives for Roscrea as a District Town.

## 7.4 Assessment of Type 3: Growth Pattern Alternatives

### Type 3 Alternative A: Town to be defined by outer ring road extent to the North

The current LAP seeks to define the northern boundary of the town with a proposals for a new outer ring road to divert traffic on the N62. If delivered this would offer an alternative route for traffic travelling in a south to north direction along the N62, however, it would also facilitate green field and dispersed development away from the town centre. This approach would also conflict with the National Climate Action Plan 2023 which seeks to use existing transport infrastructure rather than delivering additional infrastructure unless identified in strategic higher level plans.

### **Type 3 Alternative B: Town centre consolidation and linking of residential neighbourhood south of N62**

This model of growth would promote the development of the town centre, and consolidate existing neighbourhoods of residential development to the south of the town beyond the N62 in line with patterns of development that have occurred in recent years. The enhanced connectivity of these areas by investment in an active travel and public transport network would be critical. This pattern of development would limit further expansion southwards on greenfield sites, in favour of consolidation on the central area and adjoining neighbourhoods.

### **Selected Type 3 Alternative for the Plan: Alternative B**

Alternative B was chosen as it is in line with the objectives of the Climate Action Plan 2023 and could enable the compact and sustainable growth of the town and make best use of existing transport infrastructure. Type 3 alternatives are assessed against SEOs on Table 7.5.

**Table 7.5 Assessment of Type 3 Alternatives against Strategic Environmental Objectives**

Alternative	Likely to <b>Improve</b> status of SEOs		<b>Potential Conflict</b> with status of SEOs – likely to be mitigated	
	to a <b>Greater</b> degree	to a <b>Lesser</b> degree	to a <b>Lesser</b> degree	to a <b>Greater</b> degree
Type 3 Alternative A	As a result of development occurring within the Plan area PHH,	As a result of development occurring within the Plan area PHH,	Would not result in significant change to historic growth patterns and development would continue to occur BFF, PHH, MA, A, C S, W, CH, L	Would conflict with the National Climate Action Plan 2023 which seeks to use existing transport infrastructure rather than delivering additional infrastructure BFF, PHH, S, W, MA, A, C, CH, L
Type 3 Alternative B	Will enable the compact growth of the town and make best use of existing transport infrastructure BFF, PHH, MA, A, C	As a result of development occurring within the Plan area BFF, PHH, MA, A, C S, W, CH, L	As a result of development occurring within the Plan area BFF, PHH, MA, A, C S, W, CH, L	As a result of development occurring within the Plan area BFF, PHH, MA, A, C S, W, CH, L

**Type 3, Alternative B** demonstrates the greatest ability to improve the status of SEOs and is the alternative chosen in terms of appropriate approach to Serviced Land and Infrastructure assessment alternatives for Roscrea as a District Town.

## **7.5 Reasons for Selecting Chosen Alternatives**

These alternatives have been incorporated into the Plan having regard to both:

1. The environmental effects which are identified by the SEA and are detailed above; and
2. Planning - including social and economic - effects.
3. Higher level Plans, Strategies and Guidance including the NPF, the RSES and the National Climate Action Plan 2023
4. The Role of Roscrea as defined in the Tipperary County Development Plan 2022 - 2028 and the consideration of alternatives in the County Development Plan SEA process.



## Section 8 Evaluation of 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.

**Table 8.1 Strategic Environmental Objectives<sup>41</sup>**

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives
Biodiversity, Flora and Fauna	<b>BFF</b>	No net contribution to biodiversity losses or deterioration	<ul style="list-style-type: none"> <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 Action Plan and its targets</li> </ul> <p>To protect, maintain and conserve the town's natural capital</p>
Population and Human Health	<b>PHH</b>	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 style="list-style-type: none"> <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 and focus on the town Centre First approach to the consolidation of the Town.</li> <li>Safeguard the town's citizens from environment-related pressures and risks to health and well-being</li> </ul>
Soil (and Land)	<b>S</b>	Ensure the long-term sustainable management of land	<ul style="list-style-type: none"> <li>Protect soils against pollution, and prevent degradation of the soil resource</li> <li>Promote the sustainable use of infill, regeneration and brownfield sites over the use of greenfield sites</li> </ul> <p>Safeguard areas of prime agricultural land and designated geological sites</p>
Water	<b>W</b>	Protection, improvement and sustainable management of the water resource	<ul style="list-style-type: none"> <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 growth targets in the context of existing and projected water supply and wastewater 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>
	<b>MA</b>		

<sup>41</sup> See also Section 5

Material Assets		Sustainable and efficient use of natural resources	<ul style="list-style-type: none"> <li>• Optimise use of existing infrastructure and provide new infrastructure to match population distribution proposals - this includes transport infrastructure, noting the requirement for emphasis on the principles of 'Avoid, Shift, Improve'.</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 – wind, solar, hydro, biomass, energy from waste and traditional fossil fuels</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 active travel, public transport and modal shift</li> <li>• Reduce the average energy consumption per capita including promoting energy efficient buildings, retrofitting, smart-buildings, towns and grids</li> </ul>
Air	<b>A</b>	Support clean air policies that reduce the impact of air pollution on the environment and public health	<ul style="list-style-type: none"> <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	<b>C</b>	Achieving transition to a competitive, low carbon, climate-resilient economy that is cognisant of environmental impacts	<ul style="list-style-type: none"> <li>• To minimise emissions of greenhouse gasses</li> <li>• Integrate sustainable design solutions into the town's 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, compact development and increased use of public transport and active travel.</li> </ul>
Cultural Heritage	<b>CH</b>	Safeguard cultural heritage features and their settings through responsible design and positioning of development	<ul style="list-style-type: none"> <li>• Protect places, features, buildings and landscapes of cultural, archaeological or architectural heritage</li> </ul>
Landscape	<b>L</b>	<b>Protect and enhance the landscape character</b>	<ul style="list-style-type: none"> <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>

## 8.2 Cumulative Effects

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 8.3 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 8.2.

Other policies, plans and programmes that have been considered by the assessment of effects include those which are detailed under Section 2.4, 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 Southern Regional Spatial and Economic Strategy, adjoining County Development Plans and Local Area Plans);
- The Tipperary County Development Plan 2022 – 2028 and SEA Environmental Report
- Tipperary Local Economic and Community Plan (currently under review) 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, 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 Action Plan 2019 (and updates), Climate Action and Low Carbon Development (Amendment) Act 2021 and White Paper Ireland's Transition to a Low Carbon Energy Future 2015, the National Adaptation Framework 2018, and the Tipperary Climate Change Adaptation Strategy 2019 and Climate Action Charter 2019;
- Water services, waste management, transport and energy infrastructure plans (e.g. Irish Water's Water Services Strategic Plan and associated Capital Investment Plan, Southern Regional Waste Management Plan and Transportation Policies and Strategies); and
- Environmental protection and management plans (e.g. River Basin Management Plan 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:
  - Sustainable compact growth;
  - Sustainable mobility, including walking, cycling and public transport;
  - Drainage, flood risk management and resilience;
  - Renewable energy; and

- Sustainable design, energy efficiency and green and blue infrastructure.
- 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, for example, 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 and blue infrastructure, including beyond the town border;
- 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 is consistent with those described on Table 8.2. 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 Roscrea.

### 8.3 Overall Evaluation

Tipperary County Council have integrated various recommendations arising from the SEA, AA and SFRA processes into the Plan (see Section 9). Table 8.2 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, considering mitigation through both provisions integrated into the Plan – see Section 9.

Considering, *inter alia*, the detailed mitigation which has been integrated into the Plan (including that which is identified at Section 9), it has been determined that significant residual adverse environmental effects will not occur.

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 8.2 Overall Evaluation – Effects arising from the Plan**

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 Tipperary County Development Plan 2022 – 2028, NPF and associated NDP, the Southern RSES, adjacent Development Plans and lower-tier land use plans.			SEO Codes
	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non-Significant Effects	
<b>Biodiversity and Flora and Fauna</b>	<ul style="list-style-type: none"> <li>• Contribution towards protection of ecology (including designated sites, ecological connectivity, habitats) by facilitating development of lands (including those within and adjacent to the town) 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-served lands elsewhere in the town 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>• A focus on the Consolidation on the town centre and the reuse of vacant and regeneration sites through the Town centre First Approach, will reduce pressures on the need to develop greenfield sites.</li> </ul>	<p>Arising from both construction and operation of development and associated infrastructure:</p> <ul style="list-style-type: none"> <li>• 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;</li> <li>• Habitat loss, fragmentation and deterioration, including patch size and edge effects; and</li> <li>• Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species such as birds (e.g. swifts) and bats.</li> </ul>	<ul style="list-style-type: none"> <li>• Loss of an extent of non-protected habitats and species arising from the replacement of semi-natural land covers with artificial surfaces.</li> <li>• Losses or damage to ecology (these would be in compliance with relevant legislation).</li> </ul>	<b>BFF</b>

<b>Population and Human Health</b>	<ul style="list-style-type: none"> <li>• Promotion of economic growth to encourage retention of working age population and funding of sustainable development, 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 that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-served lands elsewhere in the town and beyond.</li> <li>• Contribution towards the protection of human health by facilitating development of lands 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-served lands elsewhere in the town and beyond.</li> <li>• Contribution to protection of human health and equality by the provision of active travel alternatives for transport and the development of sites closer to the town centre, thus reducing the need for travel.</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 style="list-style-type: none"> <li>• Potential adverse effects arising from flood events.</li> <li>• Potential interactions if effects arising from environmental vectors.</li> <li>• Higher dependency on the private car for transport</li> <li>• Haphazard development with poor linkages with the town centre</li> <li>• Vacancy and dereliction in the central area</li> </ul>	<ul style="list-style-type: none"> <li>• Potential interactions with residual effects on environmental vectors – please refer to residual adverse effects under “Soil”, “Water” and “Air and Climatic Factors” below.</li> </ul>	<b>PHH</b>
<b>Soil</b>	<ul style="list-style-type: none"> <li>• Contribution towards the protection of soils (including those used for agriculture) and designated sites of geological heritage by facilitating development of lands 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-served lands elsewhere in the town 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> <li>• Protection of greenfield sites from development by virtue of focus on the regeneration of brownfield and disused sites.</li> </ul>	<ul style="list-style-type: none"> <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> <li>• Existing disused and brownfield sites would remain</li> <li>• Potential for urban sprawl away from the centre</li> </ul>	<ul style="list-style-type: none"> <li>• Loss of an extent of soil function arising from the replacement of semi-natural land covers with artificial surfaces.</li> <li>• Riverbank erosion will continue to occur naturally over time and is likely to be enhanced by climate change.</li> </ul>	<b>S</b>
<b>Water</b>	<ul style="list-style-type: none"> <li>• Contribution towards the protection of water by facilitating development of lands 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-served lands elsewhere in the town 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 style="list-style-type: none"> <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 style="list-style-type: none"> <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>	<b>W</b>

<p><b>Material Assets</b></p>	<ul style="list-style-type: none"> <li>• Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-served lands elsewhere in the town 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 sustainable compact growth, sustainable mobility, sustainable design and energy efficiency.</li> <li>• More efficient use of existing transport infrastructure in line with the Climate Action plan 2023</li> </ul>	<ul style="list-style-type: none"> <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 agriculture and soil, water, biodiversity and human health - including phosphorous and nitrogen deposition as a result of agricultural activities and the production of secondary inorganic particulate matter.</li> <li>• Failure to invest in compact development, active travel and public transport thereby failing to reduce GHG emissions and dependency on the private car.</li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Residual wastes to be disposed of in line with higher-level waste management policies and will be reduced in line with the Circular Economy concept.</li> <li>• Any impacts upon public assets and infrastructure to comply with statutory planning/consent-granting framework.</li> </ul>	<p><b>MA</b></p>
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<b>Air and Climatic Factors</b>	<ul style="list-style-type: none"> <li>• Contribution towards climate mitigation and adaptation by facilitating compact development of lands that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-served lands elsewhere in the town 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 style="list-style-type: none"> <li>○ Sustainable compact growth;</li> <li>○ Sustainable mobility, including walking, cycling and public transport;</li> <li>○ Drainage, flood risk management and resilience;</li> <li>○ Renewable energy; and</li> <li>○ Sustainable design, energy efficiency and green and blue infrastructure.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>• 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, in particular noting the Plan will be supported by an Active travel plan.</li> <li>• 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.</li> </ul>	<b>AC</b>
<b>Cultural Heritage</b>	<ul style="list-style-type: none"> <li>• Contributes towards protection of cultural heritage elsewhere in the county by facilitating development in the town.</li> <li>• Contributes towards protection of cultural heritage within the town by facilitating brownfield development and regeneration.</li> <li>• Enhancement of the setting of Roscrea Castle and its connectivity with the surrounding town centre</li> </ul>	<ul style="list-style-type: none"> <li>• Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities.</li> </ul>	<ul style="list-style-type: none"> <li>• Potential effects on known architectural and archaeological heritage and unknown archaeology however, these will occur in compliance with legislation.</li> </ul>	<b>CH</b>
<b>Landscape</b>	<ul style="list-style-type: none"> <li>• Contributes towards protection of wider landscape and landscape designations by facilitating development within the town.</li> </ul>	<ul style="list-style-type: none"> <li>• Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape in the town and the surrounding rural areas.</li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<b>L</b>



## **8.4 Appropriate Assessment and Strategic Flood Risk Assessment**

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

in accordance with Article 6(3) of the Habitats Directive and Section 177U of the Planning and Development (Amendment) Act 2010 (as amended), taking into account all matters relevant, including the provisions of the Tipperary County Development Plan 2022 - 2028 it has been determined that, on the basis of objective information available at this stage, that there is no likelihood of significant effects on European sites from the Plan, individually or in combination with other plans or projects.

A final AA determination will be made in relation the Plan, having consideration to any proposed amendments and before adoption takes place. This determination will take into account any other documents prepared and submitted during the plan preparation process and any written submissions made on the draft plan and associated documents while they are on public display.

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

SFRA is required by '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. Recommendations from the SFRA have been integrated into the Plan.

Various policies and objectives have been integrated into the Plan through the SEA, SFRA and AA processes and in addition the plan is informed and guided by the provisions of the Tipperary County Development Plan 2022 - 2028. The preparation of the Plan, SEA, AA and SFRA has taken place concurrently and the findings of the AA and SFRA have informed both the Plan and the SEA.

## 8.5 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 8.3.

**Table 8.3 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								

## 8.6 Detailed Evaluation<sup>42</sup>

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

The Plan is situated in a hierarchy of documents 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 Adaptation Framework, the Climate Action Plan and the Regional Spatial and Economic Strategy for the Southern Region and in particular the **Tipperary County Development Plan 2022 - 2028** (for additional detail please refer to Section 2.4 "*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.

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<sup>42</sup> The Plan's provisions are evaluated using compatibility criteria 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 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 ("Likely to Improve status of SEOs") would be likely to result in a significant positive effect on the protection/management of the environmental component/issues to which the SEO relates.

Interactions that would potentially conflict with the status of an SEO and would be likely to be mitigated ("Mitigated Conflicts") would be likely to result in a potential significant negative effect however these effects would be likely to be mitigated by measures which have been integrated into the Plan.

Interactions with SEOs, the negative effects of which would be unlikely to be mitigated are identified as "Probable Conflict with status of SEOs – unlikely to be mitigated".

These effects include secondary, cumulative (see also Section 8.2), synergistic, short, medium and long-term permanent and temporary, positive and negative effects.

## 8.6.1 Chapters

Chapter 2: Planning and Development Strategy	Likely to <b>Improve</b> status of SEOs	Probable <b>Conflict</b> with status of SEOs – unlikely to be mitigated	<b>Mitigated Conflicts</b>	<b>No Likely</b> interaction with status of SEOs
Provisions of this Chapter include those relating to the Plan's Vision and Spatial Development strategy.	<b>BFF PHH S W MA A C CH L</b>		<b>BFF PHH S W MA A C CH L</b>	
<p><b>Commentary</b></p> <p>This chapter is supported by the Core Strategy and high tier policies and objectives of the Tipperary County Development Plan 2022 – 2028. For more details, please refer to the County Plan Chapter 2 Core Strategy and Chapter 4 Settlement Strategy Objective 4 – A in particular applies</p> <p><i>Prepare LAPs in accordance with Table 4.2: Framework of Current Town Plans and LAPs in collaboration with local communities and stakeholders. As part of this process undertake the following: (a) Prepare infrastructure and serviced land assessments<sup>32</sup>(in accordance with 'A Methodology for a Tiered Approach to Land Zoning' of the NPF), (b) Identify 'Strategic Sites' suitable for collaborative regeneration, (c) Identify 'Consolidation Sites' within the existing built up footprints of the Key Towns and District Towns that will specifically contribute to the delivery of 30% compact growth, and (d) Actively seek the regeneration of sites, infrastructure and the built environment as part of an overall focus on compact growth, active travel and low-carbon development.</i></p> <p>Roscrea is a District Town as set out in the Core Strategy, its population growth targets as set out in the CDP are reflected in Chapter 2 Planning and Development Strategy. The chapter also seeks to set a framework for a Climate Resilient, Sustainable and Low-Carbon Town, a framework for investment and a spatial development strategy that sets out that new development will be guided by the CDP with tailored local planning and objectives for the town set out. The provisions of Chapter two bind the Plan to the overriding county development plan and will contribute towards achievement of the SEOs.</p> <p>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:</p> <ul style="list-style-type: none"> <li>- Environmental effects detailed under subsections 8.2 to 8.5 of this report; and</li> <li>- Assessments of the selected alternatives for the Plan provided at Section 7 of this report.</li> </ul>				

Chapter 3: Town Centre Strategy	Likely to <b>Improve</b> status of SEOs	Probable <b>Conflict</b> with status of SEOs – unlikely to be mitigated	<b>Mitigated Conflicts</b>	<b>No Likely</b> interaction with status of SEOs
Provisions of this Chapter include those relating to a vibrant and compact town centre supported by the national Town Centre First Programme. For more details, please refer to the Plan.	<b>BFF PHH S W MA A C CH L</b>		<b>BFF PHH S W MA A C CH L</b>	
<p><b>Commentary</b></p> <p>This chapter is supported by the Core Strategy and high tier policies and objectives of the Tipperary County Development Plan 2022 – 2028 as set out in Chapter 7 Town Centres and Place-Making, in particular those set out in Chapter 7 Town Centre and Placemaking, noting provisions of objective 7-A</p> <p><i>Support the 'Town Centre First' approach, through the following: (a) Support and deliver on the 'Town Centre First' policy approach for Irish Towns to enable the development and coordination of regeneration and revitalisation of towns. (b) Work with stakeholders to stimulate regeneration and competitive bidding having consideration to the 'Investment Priorities' of the NPF and other funding opportunities as they may arise, and having consideration to the strategic regeneration potential of each town as set out in Section 4.2. (c) Actively enable urban infill/brownfield development and the practical implementation of objectives for compact growth and regeneration, through land activation measures, and by working on a collaborative basis with stakeholders to activate public land banks. (d) Identify 'Regeneration Areas/Opportunity Sites', including public lands for regeneration and development, underused key sites for housing delivery, and to drive strategic land assembly. (e) Promoting heritage-led regeneration and the reuse and conservation of core built heritage and archaeological sites within urban centres, as an integral part of place-making. (f) Encourage residential uses in town/village centres, such as at ground floor in certain instances or locations, and in living over the shop arrangements, through the flexible application of parking, amenity space and internal space standards where these standards cannot be practicably met on-site. (g) Identify 'Settlement Consolidation Sites' within built-up areas of the Key Towns and District Towns (where appropriate), with the potential to deliver significant housing provision or commercial, employment and/or mixed-use development and to generate wider regeneration of the existing built-up area and in particular the core town centre area.</i></p> <p>The Plan has complied with the provisions of objective 7 -A and a framework for investment and a spatial development strategy for the town centre area will be guided by the CDP with tailored local planning and objectives for the town set out. The provisions of Chapter 3 bind the Plan to the overriding County Development Plan and will ensure protection of the SEOs.</p> <p>Roscrea is a District Town as set out in the Core Strategy, its population growth targets as set out in the CDP are reflected in Chapter 2 Planning and Development Strategy. The chapter also seeks to set a framework for a Climate Resilient, Sustainable and Low-Carbon Town, a framework for investment and a spatial development strategy that sets out that new development will be guided by the CDP with tailored local planning and objectives for the town set out. The provisions of Chapter two bind the Plan to the overriding county development plan and will contribute towards achievement of the SEOs.</p> <p>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:</p> <ul style="list-style-type: none"> <li>- Environmental effects detailed under subsections 8.2 to 8.5 of this report; and</li> <li>- Assessments of the selected alternatives for the Plan provided at Section 7 of this report</li> </ul>				

<b>Chapter 4: Economic Development Strategy</b>	Likely to <b>Improve</b> status of SEOs	Probable <b>Conflict</b> with status of SEOs – unlikely to be mitigated	<b>Mitigated Conflicts</b>	<b>No Likely</b> interaction with status of SEOs
Provisions of this Chapter include those relating to the Plan's enterprise and employment Strategy. For more details, please refer to the Plan.	<b>BFF PHH S W MA A C CH L</b>		<b>BFF PHH S W MA A C CH L</b>	
<p><b>Commentary</b>  This chapter is supported by the Core Strategy and high tier policies and objectives of the Tipperary County Development Plan 2022 – 2028 as set out in Chapter 8 Enterprise and Rural Development and Chapter 9 Tourism and for Roscrea as a District Town and important heritage town. The provisions of objective 8 -D and 8 - L in particular are addressed by the identification of employment sites.</p> <p><i>Promote 'Strategic Employment Locations' as already identified in towns, and to continue to support a strong spatial framework for economic development, by ensuring that appropriate lands are zoned and serviced, by developing Masterplans/Frameworks for strategic landbanks, and applying land activation measures, where appropriate, to activate these lands.</i>  <i>Carry out a review of strategic employment sites in the Key Towns and District Towns to support and inform the Town Development Plans and LAPs (and any review thereof).</i></p> <p>The Plan has complied with the provisions of Chapter 8 of the County Development Plan and objective 8 – D and 8 - L and a framework for investment and employment for the town centre area will be guided by the CDP with tailored local planning and objectives for the town set out. The provisions of Chapter 4 bind the Plan to the overriding County Development Plan and will ensure protection of the SEOs.</p> <p>Roscrea is a District Town as set out in the Core Strategy, its population growth targets as set out in the CDP are reflected in Chapter 2 Planning and Development Strategy. The chapter also seeks to set a framework for a Climate Resilient, Sustainable and Low-Carbon Town, a framework for investment and a spatial development strategy that sets out that new development will be guided by the CDP with tailored local planning and objectives for the town set out. The provisions of Chapter two bind the Plan to the overriding county development plan and will contribute towards achievement of the SEOs.</p> <p>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:</p> <ul style="list-style-type: none"> <li>- Environmental effects detailed under subsections 8.2 to 8.5 of this report; and</li> <li>- Assessments of the selected alternatives for the Plan provided at Section 7 of this report</li> </ul>				

<b>Chapter 5: Sustainable Communities</b>	Likely to <b>Improve</b> status of SEOs	Probable <b>Conflict</b> with status of SEOs – unlikely to be mitigated	<b>Mitigated Conflicts</b>	<b>No Likely</b> interaction with status of SEOs
Provisions of this Chapter include those relating to housing and sustainable communities. For more details, please refer to the Plan.	<b>BFF PHH S W MA A C CH L</b>		<b>BFF PHH S W MA A C CH L</b>	
<p><b>Commentary</b>  This chapter is supported by the Core Strategy and high tier policies and objectives of the Tipperary County Development Plan 2022 – 2028, as set out in Chapter 5 Housing and Chapter 6 Supporting Sustainable Communities.</p> <p>In particular the provisions of Chapter 5 Housing set out Policy 5-5 states: <i>Support and facilitate the delivery of new residential development in towns and villages and where the applicant has demonstrated compliance with the following: a) New residential development shall meet the relevant Development Management Standards as set out in Volume 3. b) New residential developments of 10 or more units shall be accompanied by a 'Sustainability Statement', and a 'Statement of Housing Mix'. c) New development shall be of an appropriate density and quality in accordance with the Sustainable Residential Development in Urban Areas, Guidelines for Planning Authorities, (DHLGH, 2009), and any amendment thereof, and shall demonstrate that all opportunities for connectivity and linkages have been explored and incorporated in accordance with the 10-Minute Town concept and supporting active travel options.</i></p> <p>These broad policy objectives as well as the social and community objectives outlined in the Plan will ensure that affordable housing tailored to community needs is provided (noting the guidance set out in the County Housing Strategy) in tandem with community amenities and supports. The provisions of Chapter 5 bind the Plan to the overriding County Development Plan and will ensure protection of the SEOs.</p> <p>Roscrea is a District Town as set out in the Core Strategy, its population growth targets as set out in the CDP are reflected in Chapter 2 Planning and Development Strategy. The chapter also seeks to set a framework for a Climate Resilient, Sustainable and Low-Carbon Town, a framework for investment and a spatial development strategy that sets out that new development will be guided by the CDP with tailored local planning and objectives for the town set out. The provisions of Chapter two bind the Plan to the overriding county development plan and will contribute towards achievement of the SEOs.</p> <p>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:</p> <ul style="list-style-type: none"> <li>- Environmental effects detailed under subsections 8.2 to 8.5 of this report; and</li> <li>- Assessments of the selected alternatives for the Plan provided at Section 7 of this report</li> </ul>				

<b>Chapter 6: Transport and Connectivity</b>	Likely to <b>Improve</b> status of SEOs	Probable <b>Conflict</b> with status of SEOs – unlikely to be mitigated	<b>Mitigated Conflicts</b>	<b>No Likely</b> interaction with status of SEOs
Provisions of this Chapter include those relating to transport and connectivity. For more details, please refer to the Plan.	<b>BFF PHH S W MA A C CH L</b>		<b>BFF PHH S W MA A C CH L</b>	
<p><b>Commentary</b></p> <p>This chapter is supported by the Core Strategy and high tier policies and objectives of the Tipperary County Development Plan 2022 – 2028 in particular those set out in Chapter 12 Sustainable Transport Objective 12 - F, it is stated that it is an objective of the Council to prepare Active Travel Plans for all the District Towns, see below:</p> <p><i>In the preparation of multi-faceted, future-proofed and sustainable LAPs: (a) Prepare LTPs for the Key Towns (Clonmel, Thurles and Nenagh), based on the Area Based Transport Assessment Guidance (TII, 2018). (b) Prepare LTPs or Active Travel Plans, as appropriate, for the other towns. (c) Prepare Local Transport Plans and Active Travel Plans to support the preparation of LAPs in line with the timeline and framework set out in Table 4.2: Framework of Town Plans and LAPs. (d) Consider the 'Town Profile Plans' as set out in Section 4.3 and 4.4 and the walking and cycling distances and baseline figures in setting out individual targets for modal shift to active travel in the towns.</i></p> <p>The Plan provides a summary of existing transport patterns and sets out modal shift targets to be achieved over its lifetime, when considered in conjunction with the Town Centre First approach, the overall vision will help deliver a sustainable form of development with less dependency on the private car for transport. The Plan is also supported by an Active Travel Plan (Appendix 2) this will be vital as a guideline for investment and funding bids for Roscrea and will help support modal shift targets over the lifetime of the Plan. The provisions of Chapter 6 bind the Plan to the overriding County Development Plan and will ensure protection of the SEOs.</p> <p>Roscrea is a District Town as set out in the Core Strategy, its population growth targets as set out in the CDP are reflected in Chapter 2 Planning and Development Strategy. The chapter also seeks to set a framework for a Climate Resilient, Sustainable and Low-Carbon Town, a framework for investment and a spatial development strategy that sets out that new development will be guided by the CDP with tailored local planning and objectives for the town set out. The provisions of Chapter two bind the Plan to the overriding county development plan and will contribute towards achievement of the SEOs.</p> <p>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:</p> <ul style="list-style-type: none"> <li>- Environmental effects detailed under subsections 8.2 to 8.5 of this report; and</li> <li>- Assessments of the selected alternatives for the Plan provided at Section 7 of this report</li> </ul>				

<b>Chapter 7: Recognising our Local Heritage</b>	Likely to <b>Improve</b> status of SEOs	Probable <b>Conflict</b> with status of SEOs – unlikely to be mitigated	<b>Mitigated Conflicts</b>	<b>No Likely</b> interaction with status of SEOs
Provisions of this Chapter include those relating to built, social and natural heritage. For more details, please refer to the Plan.	<b>BFF PHH S W MA A C CH L</b>		<b>BFF PHH S W MA A C CH L</b>	
<p><b>Commentary</b></p> <p>This chapter is supported by the Core Strategy and high tier policies and objectives of the Tipperary County Development Plan 2022 – 2028, as set out in Chapter 11 Environment and Natural Assets, Chapter 13 Built Heritage and Chapter 14 Green and Blue Infrastructure. The Plan sets out to identify and protect the local assets of the town including its water courses and riparian zones, architectural conservation areas, archaeology, views and streetscapes and Sean Ross Abbey. Protected Structures for Roscrea have been already reviewed and incorporated in the RPS for the Tipperary County Development Plan 2022 – 2028. The provisions of Chapter 7 bind the Plan to the overriding County Development Plan and will ensure protection of the SEOs.</p> <p>Roscrea is a District Town as set out in the Core Strategy, its population growth targets as set out in the CDP are reflected in Chapter 2 Planning and Development Strategy. The chapter also seeks to set a framework for a Climate Resilient, Sustainable and Low-Carbon Town, a framework for investment and a spatial development strategy that sets out that new development will be guided by the CDP with tailored local planning and objectives for the town set out. The provisions of Chapter two bind the Plan to the overriding county development plan and will contribute towards achievement of the SEOs.</p> <p>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:</p> <ul style="list-style-type: none"> <li>- Environmental effects detailed under subsections 8.2 to 8.5 of this report; and</li> <li>- Assessments of the selected alternatives for the Plan provided at Section 7 of this report</li> </ul>				

<b>Chapter 8: Infrastructure, Energy and Utilities</b>	Likely to <b>Improve</b> status of SEOs	Probable <b>Conflict</b> with status of SEOs – unlikely to be mitigated	<b>Mitigated Conflicts</b>	<b>No Likely</b> interaction with status of SEOs
Provisions of this Chapter include those relating to infrastructure, energy and utilities. For more details, please refer to the Plan.	<b>BFF PHH S W MA A C CH L</b>		<b>BFF PHH S W MA A C CH L</b>	
<p><b>Commentary</b></p>				

This chapter is supported by the Core Strategy and high tier policies and objectives of the Tipperary County Development Plan 2022 – 2028 in particular those set out in Chapter 15 Water and Energy Utilities. Flood Risk management is also addressed in this Chapter reflecting the objectives of the County Development Plan in Chapter 11. It is a key objective of the County Development Plan as set out in Objective 15 - A to: *Work in partnership with Irish Water in the performance of its functions and in the implementation of the Water Services Strategic Plan, Investment Plan and National Water Resources Plan (and any amendment thereof), to ensure that water infrastructure complies with appropriate regulations and to ensure and support the sustainable development of the county.*

In preparing the Serviced land Assessment that accompanies the Plan, the Council collaborated with Irish Water in carrying out an assessment of services and infrastructure for land zoning decision making. This approach as ensured that the growth planned for Roscrea can be sustainably serviced over the plan period. The provisions of Chapter 8 bind the Plan to the overriding County Development Plan and will ensure protection of the SEOs.

Roscrea is a District Town as set out in the Core Strategy, its population growth targets as set out in the CDP are reflected in Chapter 2 Planning and Development Strategy. The chapter also seeks to set a framework for a Climate Resilient, Sustainable and Low-Carbon Town, a framework for investment and a spatial development strategy that sets out that new development will be guided by the CDP with tailored local planning and objectives for the town set out. The provisions of Chapter two bind the Plan to the overriding county development plan and will contribute towards achievement of the SEOs.

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 8.5 of this report; and
- Assessments of the selected alternatives for the Plan provided at Section 7 of this report

<b>Chapter 9: Landuse Zoning</b>	Likely to <b>Improve</b> status of SEOs	Probable <b>Conflict</b> with status of SEOs – unlikely to be mitigated	<b>Mitigated Conflicts</b>	<b>No Likely</b> interaction with status of SEOs
Provisions of this Chapter include those relating to land use zoning and are supplemented by the Serviced Land Assessment - Appendix 1. For more details, please refer to the Plan.	<b>BFF PHH S W MA A C CH L</b>		<b>BFF PHH S W MA A C CH L</b>	
<p><b>Commentary</b>                      This chapter is supported by the Core Strategy and high tier policies and objectives of the Tipperary County Development Plan 2022 – 2028. In addition, it is underpinned by the SLA with a tiered approach to zoning in accordance with the NPF requirements and is informed by the Development Plan Guidelines for Planning Authorities (DHLGH, 2022). Nine landuse zone types are identified and will give an indication of the acceptability or otherwise of a particular use in particular areas, proposed development will also be assessed in terms of compliance with the policies set out in the TCDP and Development Management Standards<sup>43</sup> set out therein, the Planning Guidelines and local planning objectives of this LAP. The provisions of Chapter 9 bind the Plan to the overriding County Development Plan and will ensure protection of the SEOs by managing and controlling new development and delivering proper planning and sustainable development in the town.</p> <p>Roscrea is a District Town as set out in the Core Strategy, its population growth targets as set out in the CDP are reflected in Chapter 2 Planning and Development Strategy. The chapter also seeks to set a framework for a Climate Resilient, Sustainable and Low-Carbon Town, a framework for investment and a spatial development strategy that sets out that new development will be guided by the CDP with tailored local planning and objectives for the town set out. The provisions of Chapter two bind the Plan to the overriding county development plan and will contribute towards achievement of the SEOs.</p> <p>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:</p> <ul style="list-style-type: none"> <li>- Environmental effects detailed under subsections 8.2 to 8.5 of this report; and</li> <li>- Assessments of the selected alternatives for the Plan provided at Section 7 of this report</li> </ul>				

## 8.6.2 Appendices

<b>Serviced Land Assessment</b>	Likely to <b>Improve</b> status of SEOs	Probable <b>Conflict</b> with status of SEOs – unlikely to be mitigated	<b>Mitigated Conflicts</b>	<b>No Likely</b> interaction with status of SEOs
The Serviced Land Assessment is based on a detailed model that has examined all available lands suitable for residential use, mixed use and employment use. A GIS modeling system identified land parcels and these were assessed against preset infrastructure and sustainable planning criteria to determine their suitability for sustainable development and noting if land was serviced, serviceable or not reasonably serviceable over the lifetime of the Plan.	<b>BFF PHH S W MA A C CH L</b>		<b>BFF PHH S W MA A C CH L</b>	
<p><b>Commentary</b>                      This appendix is supported by the Core Strategy and high tier policies and objectives of the Tipperary County Development Plan 2022 – 2028 in particular those set out in Chapter 4 Policy Objective 4-A</p>				

Prepare LAPs in accordance with Table 4.2: Framework of Current Town Plans and LAPs in collaboration with local communities and stakeholders. As part of this process undertake the following: (a) Prepare infrastructure and serviced land assessments<sup>32</sup>(in accordance with 'A Methodology for a Tiered Approach to Land Zoning' of the NPF), (b) Identify 'Strategic Sites' suitable for collaborative regeneration, (c) Identify 'Consolidation Sites' within the existing built up footprints of the Key Towns and District Towns that will specifically contribute to the delivery of 30% compact growth, and (d) Actively seek the regeneration of sites, infrastructure and the built environment as part of an overall focus on compact growth, active travel and low-carbon development.

The assessment of the SLA and subsequent land zoning map 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 to focus on directing: compact, sustainable development within and adjacent to the existing built-up footprint of the town. Development of areas within and adjacent to the existing built-up footprint, which are generally more robust, better serviced and better connected, will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development will be supported by placemaking/town centre first initiatives to enable the town to become more a desirable place to live – so that new residents can be accommodated with the services they need. Compatible sustainable development in the towns sensitive areas is also provided for, subject to various requirements relating to environmental protection and management being met.

The SLA will contribute towards the Statutory consent granting and decision-making framework for land use developments and activities, and sustainable development of the town, 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.

Environmental considerations were integrated into the land use zoning through an interdisciplinary approach involving Planners and environmental specialists. 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 and Southern RSES. The detailed Plan preparation process undertaken by the Planning Department in consultation with service providers such as IW, combined with specialist input seeks to facilitate zoning that will help to avoid inappropriate development being permitted in areas of elevated sensitivity, such as in areas at risk of flooding or ecological sensitivity;

- The detailed Plan preparation process undertaken by the Planning Department combined with specialist input from the SEA and AA process facilitated zoning that avoids impacts upon sensitive ecology and European Sites. The AA screening processes concludes that the Plan, is not likely to affect the integrity of the Natura 2000 network of European Sites<sup>44</sup>.
- The detailed Plan preparation process undertaken by the Planning Department combined with specialist input from the SFRA process facilitated zoning that avoids inappropriate development being permitted in areas of elevated flood risk.
- The planning team also took into account other environmental considerations including sustainable mobility and sensitivities relating to cultural heritage, landscape and water as detailed in Section 4 of this report.

<b>Sustainable Travel Plan</b>	Likely to <b>Improve</b> status of SEOs	Probable <b>Conflict</b> with status of SEOs – unlikely to be mitigated	<b>Mitigated Conflicts</b>	<b>No Likely</b> interaction with status of SEOs
This Plan sets out an analysis of existing travel patterns and infrastructure in the town in a baseline assessment, modal shift targets are identified and objectives for investment in active travel and public transport are set out. For more details, please refer to the Plan.	<b>BFF PHH S W MA A C CH L</b>		<b>BFF PHH S W MA A C CH L</b>	
<p><b>Commentary</b> This appendix is supported by the Core Strategy and high tier policies and objectives of the Tipperary County Development Plan 2022 – 2028 in particular those set out in Chapter 12 Sustainable Transport Objective 12 - F, it is stated that it is an objective of the Council to prepare Active Travel Plans for all the District Towns, see below:</p> <p><i>In the preparation of multi-faceted, future-proofed and sustainable LAPs: (a) Prepare LTPs for the Key Towns (Clonmel, Thurles and Nenagh), based on the Area Based Transport Assessment Guidance (TII, 2018). (b) Prepare LTPs or Active Travel Plans, as appropriate, for the other towns. (c) Prepare Local Transport Plans and Active Travel Plans to support the preparation of LAPs in line with the timeline and framework set out in Table 4.2: Framework of Town Plans and LAPs. (d) Consider the 'Town Profile Plans' as set out in Section 4.3 and 4.4 and the walking and cycling distances and baseline figures in setting out individual targets for modal shift to active travel in the towns.</i></p> <p>The Sustainable Travel Plan is vital as a vital guideline for investment and funding bids for Roscrea and will help support modal shift targets over the lifetime of the Plan.</p>				

<b>Regeneration Sites</b>	Likely to <b>Improve</b> status of SEOs	Probable <b>Conflict</b> with status of SEOs – unlikely to be mitigated	<b>Mitigated Conflicts</b>	<b>No Likely</b> interaction with status of SEOs
A schedule of sites in need of active regeneration and reuse is set out to be further developed over the lifetime of the Plan with the support of the Town Centre First programme.	<b>BFF PHH S W MA A C CH L</b>		<b>BFF PHH S W MA A C CH L</b>	
<p><b>Commentary</b></p>				

<sup>44</sup> Except as provided for in Article 6(4) of the Habitats Directive, viz. There must be: (a) no alternative solution available, (b) imperative reasons of overriding public interest for the plan to proceed; and (c) adequate compensatory measures in place.



This appendix is supported by the Core Strategy and high tier policies and objectives of the Tipperary County Development Plan 2022 – 2028, in particular those set out in Chapter 7 Town Centre and Placemaking, noting provisions of objective 7-A

*Support the 'Town Centre First' approach, through the following: (a) Support and deliver on the 'Town Centre First' policy approach for Irish Towns to enable the development and coordination of regeneration and revitalisation of towns. (b) Work with stakeholders to stimulate regeneration and competitive bidding having consideration to the 'Investment Priorities' of the NPF and other funding opportunities as they may arise, and having consideration to the strategic regeneration potential of each town as set out in Section 4.2. (c) Actively enable urban infill/brownfield development and the practical implementation of objectives for compact growth and regeneration, through land activation measures, and by working on a collaborative basis with stakeholders to activate public land banks. (d) Identify 'Regeneration Areas/Opportunity Sites', including public lands for regeneration and development, underused key sites for housing delivery, and to drive strategic land assembly. (e) Promoting heritage-led regeneration and the reuse and conservation of core built heritage and archaeological sites within urban centres, as an integral part of place-making. (f) Encourage residential uses in town/village centres, such as at ground floor in certain instances or locations, and in living over the shop arrangements, through the flexible application of parking, amenity space and internal space standards where these standards cannot be practicably met on-site. (g) Identify 'Settlement Consolidation Sites' within built-up areas of the Key Towns and District Towns (where appropriate), with the potential to deliver significant housing provision or commercial, employment and/or mixed-use development and to generate wider regeneration of the existing built-up area and in particular the core town centre area.*

This schedule of sites in need of active regeneration and reuse will be important to support and guide of the Town Centre First programme, enable collaborate regeneration and attract investment in the regeneration of the centre.

<p><b>Town Centre First Plan</b></p>	<p>Likely to <b>Improve</b> status of SEOs</p>	<p>Probable <b>Conflict</b> with status of SEOs – unlikely to be mitigated</p>	<p><b>Mitigated Conflicts</b></p>	<p><b>No Likely</b> interaction with status of SEOs</p>
<p>The Town Centre First Plan is currently under development and when available will be adopted as part of the Roscrea Local Area Plan Appendix 4.</p>	<p><b>BFF PHH S W MA A C CH L</b></p>		<p><b>BFF PHH S W MA A C CH L</b></p>	
<p><b>Commentary</b>                  This appendix is supported by the Core Strategy and high tier policies and objectives of the Tipperary County Development Plan 2022 – 2028, in particular those set out in Chapter 7 Town Centre and Placemaking, noting provisions of objective 7-A</p> <p><i>Support the 'Town Centre First' approach, through the following: (a) Support and deliver on the 'Town Centre First' policy approach for Irish Towns to enable the development and coordination of regeneration and revitalisation of towns. (b) Work with stakeholders to stimulate regeneration and competitive bidding having consideration to the 'Investment Priorities' of the NPF and other funding opportunities as they may arise, and having consideration to the strategic regeneration potential of each town as set out in Section 4.2. (c) Actively enable urban infill/brownfield development and the practical implementation of objectives for compact growth and regeneration, through land activation measures, and by working on a collaborative basis with stakeholders to activate public land banks. (d) Identify 'Regeneration Areas/Opportunity Sites', including public lands for regeneration and development, underused key sites for housing delivery, and to drive strategic land assembly. (e) Promoting heritage-led regeneration and the reuse and conservation of core built heritage and archaeological sites within urban centres, as an integral part of place-making. (f) Encourage residential uses in town/village centres, such as at ground floor in certain instances or locations, and in living over the shop arrangements, through the flexible application of parking, amenity space and internal space standards where these standards cannot be practicably met on-site. (g) Identify 'Settlement Consolidation Sites' within built-up areas of the Key Towns and District Towns (where appropriate), with the potential to deliver significant housing provision or commercial, employment and/or mixed-use development and to generate wider regeneration of the existing built-up area and in particular the core town centre area.</i></p>				

## 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, AA screening process and 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; and
- Integration of individual SEA, AA screening and SFRA provisions into the text of the Plan.
- In developing the LAP, by ensuring compliance with the Higher Tier Policies and Objectives as set out in the Tipperary County Development Plan 2022 – 2028.

### 9.2 How the Council Contributes Towards Environmental Protection and Sustainable Development

Far in advance of both the submission of the pre-Draft Plan to the Elected Members for approval, the placing of the Draft Plan on public display and the adoption of the Plan, Tipperary County Council carried out research and data analysis, including the preparation of a Strategic Issues Paper and Background papers in order to inform the preparation of the Plan. Detailed consultation and collaboration with stakeholders such as Irish Water, the Office of the Planning Regulator, the Office of Public Works etc was also carried out.

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

Strategic work undertaken by the Council includes background work in relation to Plan Strategies and other provisions for a variety of sectors.

### 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 a result of its compliance with the Core Strategy of the TCDP), 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

Environmental considerations were integrated into the Plan's zoning through an interdisciplinary approach and a considered Serviced Land Assessment and capacity analysis.

Zoning has been applied in a way that primarily seeks to achieve sustainable and compact growth, considering the various requirements set out in the higher-level NPF, Southern RSES and TCDP.

The detailed Plan preparation process undertaken by the Planning Department combined with specialist seeks to facilitate zoning that will help to avoid inappropriate development being permitted in areas of elevated sensitivity, such as in areas at risk of flooding or ecological sensitivity. Various

provisions have been integrated into the Plan that provide for flood risk management and ecological protection and management at project level.

Also considered were environmental sensitivities relating to ecology, cultural heritage, landscape and water, as well as the overlay mapping of environmental sensitivities.

## **9.5 Integration of SEA, AA and SFRA Provisions into the Plan**

Various provisions relevant to the local area of Roscrea have been integrated into the text of the 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 local 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 help to minimise flood risk and the protection of human health, for example.

**Table 9.1 Integration of Environmental Considerations into the Plan**

Topic	Potentially Significant Adverse Effect, if Unmitigated	Recommendations integrated into the Plan, included in:			
Various – see below	Various – see below	<p><b>To be read in conjunction with the Higher Tier Planning Objectives and Policies as outlined in the Tipperary County Development Plan 2022 – 2028</b></p> <table border="1"> <tr> <td>Policy 2.1</td> <td>Permit and support new development that will enable sustainable housing growth, employment and prosperity for Roscrea District Town and its community in line with the Strategic Objectives of the TCDP.</td> </tr> </table>		Policy 2.1	Permit and support new development that will enable sustainable housing growth, employment and prosperity for Roscrea District Town and its community in line with the Strategic Objectives of the TCDP.
Policy 2.1	Permit and support new development that will enable sustainable housing growth, employment and prosperity for Roscrea District Town and its community in line with the Strategic Objectives of the TCDP.				
Biodiversity and flora and fauna	<p>Arising from both construction and operation of development and associated infrastructure:</p> <ul style="list-style-type: none"> <li>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;</li> <li>Habitat loss, fragmentation and deterioration, including patch size and edge effects; and</li> <li>Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species such as birds (e.g. swifts) and bats.</li> </ul>	Policy 2.3	Support and permit compact residential growth in Roscrea through the sustainable intensification and consolidation of the town centre, and established residential areas and to meet identified housing targets and requirements in line with the Sustainable Residential Development in Urban Areas, Guidelines for Planning Authorities (DEHLG, 2009).		
		Policy 3.1	Enable the collaborative redevelopment and reuse of vacant and underused sites and areas in the 'Urban Core' and 'Compact Growth' area, and in particular, to permit the redevelopment of Town Centre 'Regeneration Sites' and areas zoned for 'Regeneration' (see Section 4.2.1)		
Population and human health	<ul style="list-style-type: none"> <li>Potential adverse effects arising from flood events.</li> <li>Potential interactions if effects arising from environmental vectors.</li> </ul>	Objective 2-B	Work in partnership with community groups in the regeneration and revitalisation of Roscrea and to actively seek and secure funding and investment under available national and regional investment and funding programmes in line with the development strategy as set out.		
		Policy 2.1	Permit and support new development that will enable sustainable housing growth, employment and prosperity for Roscrea District Town and its community in line with the Strategic Objectives of the TCDP.		
		Policy 4.1	<p>In considering new employment proposals on lands zoned for 'Employment', to assess the nature of the proposed use, the availability of space within existing serviced employment areas, and the following:</p> <ol style="list-style-type: none"> <li>New office-based development with a high number and density of employees shall be located on sites with easy employee access i.e. of public transport/active travel accessibility between home and work.</li> <li>New office, research and development and high technology/ high technology manufacturing type employment, shall be located in an area already serviced and landscaped for such uses, unless it is demonstrated that there is no availability of such sites.</li> </ol>		
		Policy 4.2	Permit new visitor accommodation, arts and cultural development, orientation and signage to support the tourism industry and the development of tourism linkages/clusters with neighbouring areas and towns in line with current national and local tourism programmes including 'Tipperary Transforming – Tourism Product Development Plan 2020 – 2030.		
		Objective 4C	Actively support and enable the redevelopment of the REACH (Roscrea Enterprise and Community Hub) as a high-quality facility for new employment and enterprise.		
		Policy 5.2	Require new residential development to accord with the principles and guidelines of Sustainable Residential Guidelines for Planning Authorities in Urban Areas (DEHLG, 2009) and the Urban Development and Building Height Guidelines for Planning Authorities (DHPLG, 2018) and the overriding policies and objectives for new residential development.		

		Policy 5.3	New development shall support the 'Neighbourhoods', as set out in Section 5.2.1, ensuring appropriate residential densities on central areas in line with the Sustainable Residential Guidelines for Planning Authorities in Urban Areas (DEHLG, 2009).
		Policy 5.4	Permit new dwellings on lands zoned for 'Town Environs' where the applicant meets an 'Economic Need' (see TCDP Table 5.3 and Planning Policy 5 - 11), and there is no availability of alternative sites. An existing and/or shared domestic dwelling entrance of the applicant's family dwelling should be used, where practicable, and it will meet sightline requirements set out in TCDP Volume 3, Appendix 6, Section 6.1 Road Design and Visibility at a Direct Access.
		Policy 5.5	Require new development to consider the provisions 'Roscrea Age Friendly Town', and to seek to ensure that the age friendly policies and objectives relating to housing, public realm, amenity, accessibility, public transport etc are applied in assessing new development proposals.
		Policy 5.6	Permit 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 in the town
		Objective 5C	Develop, in conjunction with the Council's Active Travel Team, interconnectivity and linkages within, and between the neighbourhoods as identified as in Section 5.2.1 and the town centre, the train station, employment areas and local schools.
		Objective 5B	Support educational, community-led and cultural projects which enhance the well-being of residents of the town and improve the quality of the environment in the town, as part of this to support the development of a new Family Resource Centre.
		Objective 5E	Develop interconnectivity and linkages between the Templemore Road (N62) and the New Road through the existing residential areas located south of the N62 (identified as a neighbourhood in Section 5.2.1)
		Objective 5F	Ensure the continued operation and expansion of schools in Roscrea on lands zoned for 'Community Services and Infrastructure', in line with the Provision of Schools and the Planning System Code of Practice (DoE, 2008).
		Objective 5G	Work with Age-Friendly Ireland in implementing the strategies and objectives of Tipperary Age-Friendly Strategy.
		Objective 5H	Consult with local community groups, including the PPN and broad-based organisations such as Comhairle na nOg, as part of the development of local policies and strategies.
		Objective 5I	Secure high-quality digital connectivity in Roscrea in line with the National Broad Band Plan.
		Policy 6.1	Enable new development that will improve accessibility and movement within Roscrea, 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 and public transport.
		Policy 6.2	Ensure that new developments are designed to comply with Design Manual for Urban Roads and Streets (2019) including making provision for pedestrian and cycle infrastructure and enhancing connectivity and accessibility to the town
		Objective 6A	Through the Council's Active Travel Team and under the annual National Active Travel Grants Programme, actively seek funding for investment in Active Travel and Public Transport in the town in line with the provisions of the Active Travel Plan as outlined in Appendix 2.
		Objective 6B	Collaborate with the NTA and Irish Rail to consider how the rail service, infrastructure and facilities can be better tailored to the needs of the community.
		Objective 6C	Collaborate with the NTA, national and local bus service providers to consider how the bus service, infrastructure and facilities can be better tailored to the needs of the community, including for a consideration of the nature and location of public bus stops.
		Objective 6D	Achieve the modal shift target as set out in this LAP and its Active Travel Plan as outlined in Appendix 2 through collaboration with the community and transport sectors over the life time of this LAP.
Soil	<ul style="list-style-type: none"> <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>	Policy 2.3	Support and permit compact residential growth in Roscrea through the sustainable intensification and consolidation of the town centre and established residential areas to meet identified housing targets and requirements.
		Policy 3.1	Enable the collaborative redevelopment and reuse of vacant and underused sites and areas in the 'Urban Core' and 'Compact Growth' area, and in particular, to permit the redevelopment of Town Centre 'Regeneration Sites' and areas zoned for 'Regeneration' (see Section 4.2.1)
		Policy 5.1	Permit and encourage compact growth in Roscrea through the sustainable intensification and consolidation of the town centre and established residential areas on lands zoned for Urban Core, Regeneration and Residential uses.

Water	<ul style="list-style-type: none"> <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>	Policy 7.1	<p>Protect and conserve the integrity and ecological and biodiversity value of the River Bunnow as it runs through the town. Ensure that any development proposals within or adjacent to the river are appropriately assessed to ensure the protection of water quality and river access.</p> <p>To contribute towards protection and improvement of the status of surface and ground waters in accordance with the Water Framework Directive. 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.</p>
		Objective 7A	Support and work with the local community in the development of blue and green infrastructure in the town and in the enhancement of the biodiversity and conservation value of the river corridor.
		Objective 7B	Work in partnership with stakeholders and the local community in the delivery of projects for Roscrea Town in the Green and Blue Infrastructure Masterplan Roadmap for Tipperary Waterways (TCC, 2018) and the proposed Tipperary Greenway and trail Strategy and seek funding opportunities as they arise.
		Objective 7C	Support and work with the local community in the development of blue and green infrastructure in the town and in the enhancement of the biodiversity, amenity and conservation value of the River Bunnow corridor.
		Policy 8.1	Enable the sustainable and efficient use of existing capacity in water services and permit new connections to the Roscrea public and waste water supply. Where local network upgrades are required, to ensure that capacity is provided to individual sites in accordance with the Irish Water Connections Charging Policy and Irish Water's Connections and Developer Service
		Policy 8.2	Require that all development proposals in Roscrea integrate SUDS and nature-based solutions to SUDS as part of an overall sustainable urban drainage and urban greening approach, unless they are demonstrated to be operationally unfeasible to the satisfaction of the Council. Refer also to Section 3.5 of the accompanying SFRA, "Sustainable Urban Drainage Systems and Surface Water Guidance and Strategy"
		Policy 8.4	<p>Require proposals for development to comply with requirements of the Planning System and Flood Risk Assessment Guidelines (DEHLG, 2009) and any updated thereof) including providing detailed design specifications as may be required to facilitate the impact of development. The following provisions apply:</p> <ol style="list-style-type: none"> <li>Extensions of existing uses or minor development within flood risk areas will be supported, provided they do not: obstruct important flow paths; introduce a number of people into flood risk areas; entail the storage of hazardous substances; have adverse impacts or impede access to a watercourse, floodplain or flood protection and management facilities; or increase the risk of flooding elsewhere.</li> <li>Applications for development on previously developed lands within Flood Zones A or B, shall be subject to site specific flood risk assessment and shall provide details of structural and non-structural flood risk management measures, such as those relating to floor levels, internal layout, flood-resistant construction, flood-resilient construction, emergency response planning and access and egress during flood events.</li> <li>Where a Justification Test applies, it must be demonstrated to the satisfaction of the planning authority that the flood risk can be adequately managed, and that the use and the development of the lands will not cause unacceptable impacts elsewhere.</li> <li>Require the submission of site-specific Flood Risk Assessments for developments undertaken within Flood Zones A &amp; B and on lands subject to the mid-range future scenario floods extents, as published by the Office of Public Works. These Flood Risk Assessments shall consider climate change impacts and adaptation measures including details of structural and non-structural flood risk management measures, such as those relating to floor levels, internal layout, flood-resistant construction, flood-resilient construction, emergency response planning and access and egress during flood events</li> <li>Groundwater and pluvial flood risks shall be considered by any site-specific flood risk assessment undertaken at project level, in compliance with the Flood Risk Management Guidelines.</li> </ol>
		Objective 8A	In conjunction with Irish Water to continually progress water supply and sewer rehabilitation activities, capital maintenance activities, etc in line with the Roscrea Drainage Area Plan and Wastewater Infrastructure Plan, and to continue to monitor the performance of the networks to ensure that the most urgent works are prioritised as required.
		Objective 8B	To integrate a Nature Based Approach to SUDS, with a focus on biodiversity as part of new public realm and public sector development in the town.

Air and Climatic Factors	<ul style="list-style-type: none"> <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>	<table border="1"> <tr> <td>Policy 2.2</td> <td>Require new development to incorporate best practice in low-carbon and energy efficient planning and techniques as reflected by the policies and objectives of the TCDP and this LAP and in accordance with the forthcoming Climate Action Plan for Tipperary 2023 (and any review thereof).</td> </tr> <tr> <td>Objective 2-A</td> <td>As part of the Tipperary Climate Action Plan 2023 (when complete), support the local community to identify and implement measures and actions to reduce energy consumption, produce renewable energy from local resources and to adapt to a changing climate</td> </tr> <tr> <td>Policy 3.1</td> <td>Enable the collaborative redevelopment and reuse of vacant and underused sites and areas in the 'Urban Core' and 'Compact Growth' area, and in particular, to permit the redevelopment of Town Centre 'Regeneration Sites' and areas zoned for 'Regeneration' (see Section 4.2.1)</td> </tr> <tr> <td>Objective 5A</td> <td>Support the local community and relevant sectors in engaging in programmes such as 'the SEAI Sustainable Energy Community' through the provisions of the Tipperary Climate Action Plan and Delivering Climate Action 2030 (CCMA, 2021). In preparing sectoral adaptation plans and sustainable energy and climate action initiatives, including in the preparation of an Energy Master Plan and in the identification and use of local renewable energy sources.</td> </tr> <tr> <td>Policy 6.1</td> <td>Enable new development that will improve accessibility and movement within Roscrea, 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 and public transport.</td> </tr> <tr> <td>Objective 6A</td> <td>Through the Council's Active Travel Team and under the annual National Active Travel Grants Programme, actively seek funding for investment in Active Travel and Public Transport in the town in line with the provisions of the Active Travel Plan as outlined in Appendix 2.</td> </tr> <tr> <td>Policy 8.3</td> <td>Permit and encourage the use of renewable energy technologies in residential, commercial and community developments.</td> </tr> </table>	Policy 2.2	Require new development to incorporate best practice in low-carbon and energy efficient planning and techniques as reflected by the policies and objectives of the TCDP and this LAP and in accordance with the forthcoming Climate Action Plan for Tipperary 2023 (and any review thereof).	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Material Assets	<ul style="list-style-type: none"> <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 agriculture and soil, water, biodiversity and human health - including phosphorous and nitrogen deposition as a result of agricultural activities and the production of secondary inorganic particulate matter.</li> </ul>	<table border="1"> <tr> <td>Policy 3.1</td> <td>Enable the collaborative redevelopment and reuse of vacant and underused sites and areas in the 'Urban Core' and 'Compact Growth' area, and in particular, to permit the redevelopment of Town Centre 'Regeneration Sites' and areas zoned for 'Regeneration' (see Section 4.2.1)</td> </tr> <tr> <td>Policy 3.5</td> <td>Permit new development which enhances the setting of Roscrea town centre, including its architectural and historical heritage and character, in the assessment of new development proposals, as part of this support high quality urban design, compact growth, and facilitate connectivity and active travel as opportunities arise.</td> </tr> <tr> <td>Objective 3.1</td> <td>Support the Town Regeneration Officer and Town Team to prepare a collaborative Town Centre First Plan for Roscrea that will build on collaborate work and successful funding applications to date, and to provide a framework for which further funding will be sought.</td> </tr> <tr> <td>Objective 3.2</td> <td>Work with and support landowners of sites with potential for regeneration and development to enable their planning and delivery as part of a Town Centre First programme.</td> </tr> <tr> <td>Objective 3.3</td> <td>Offer support to landowners through its planning, housing and local enterprise services and offer regeneration schemes such as the Commercial Vacancy Incentive Scheme, the Croí Cónaithe Scheme, the Repair and Lease Scheme, Buy and Renew Scheme etc.</td> </tr> <tr> <td>Objective 3.4</td> <td>Offer support in the form of advice and training, to landowners and planning agents, to help overcome planning obstacles to the occupation and reuse of vacant upper floors and commercial units in the town centre; 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		Policy 6.4	Support the sequential development of lands zoned for development, and to ensure that provision is made for the orderly expansion into areas that may be zoned in the future. In assessing new planning applications, and on a case-by-case basis, the Council may require the maintenance of a corridor to provide for future connectivity with adjoining un-zoned lands.
		Policy 6.5	Support the development of a new western relief route to remove M7 to N62 northbound traffic from the town centre (between the N62 to Birr and the R445 to Nenagh) this indicative route study corridor will be maintained free from development that might prejudice future route planning
		Policy 6.6	Require proposals for new development to have consideration to and to incorporate the provisions of the Active Travel Plan as outlined in Appendix 2.
		Objective 6E	Seek to secure funding for the development of a new relief road to provide connectivity between the N62 (Templemore) and the N62 (Birr)
		Objective 8C	Support the sustainable management of waste and enable a significant reduction in the production of waste in Roscrea, in line with the principles of the Waste Action Plan for a Circular Economy (DECC, 2021).
Cultural Heritage	<ul style="list-style-type: none"> <li>Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities</li> </ul>	Policy 3.5	Permit new development which enhances the setting of Roscrea town centre, including its architectural and historical heritage and character, in the assessment of new development proposals, as part of this support high quality urban design, compact growth, and facilitate connectivity and active travel as opportunities arise.
		Objective 4D	Support the development of arts and cultural activities, new visitor accommodation and activity-based leisure activities to support the tourism industry in the town; and promote and expand physical and cultural tourism linkages with neighbouring areas and towns.
		Objective 4E	Better link the town centre and Castle Street to Roscrea Castle and Demesne Castle through public realm works, in line with the Tipperary Transforming Heritage Theme and its 'Hero Product' concept, thus adding value and enhancing the visitor experience. The key focus is to enhance the arrival experience by decluttering of elements that impact on the presentation of the castle.
		Policy 7.2	Ensure the setting and character of Roscrea Castle, including the setting of Castle Street is safeguarded and enhanced in the assessment of new development proposals. Enhance connectivity and access in the historical centre as opportunities arise.
		Policy 7.3	Require new development proposals to have regard to the architectural character and special value of the Roscrea ACAs, in accordance with the Architectural Heritage Protection, Guidelines for Planning Authorities (DEHLG, 2004).
		Policy 7.4	Safeguard sites, features and objects of archaeological interest in Roscrea (in situ where practicable or as a minimum, preservation by record) included in the Record of Monuments and Places and sites.
		Objective 7D	To proactively and collaboratively work with the landowners of Sean Ross Abbey to investigate ways that the Abbey and its grounds can be used in a manner respectful of its past and considerate of its future potential as an important part of the community and town of Roscrea.
Landscape	<ul style="list-style-type: none"> <li>Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape.</li> </ul>	Policy 7.5	The views and streetscapes as listed shall be given due consideration as part of the design process for new development to the satisfaction of the Council.
		Policy 7.6	With respect Sean Ross Abbey and its grounds: <ol style="list-style-type: none"> <li>Protect the architectural, archaeological and social special interests associated with Sean Ross Abbey and its attendant grounds and to respect the institutional past associated with this site.</li> <li>Consider appropriate and active uses of the complex and to preserve the buildings and grounds for disuse and dereliction.</li> <li>Apply a precautionary approach (in line with the Institutional Burials Act 2022) to the application of measures to ensure the protection of unrecorded burials (where there is a possibility that unrecorded burials may have taken place), on foot of the publication of the Final Report of the Commission of Investigation into Mother and Baby Homes.</li> </ol>



## 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 LAP in the land use planning hierarchy beneath TCDP 2022, the measures identified in the TCDP 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 Southern RSES and the TCDP, is subject to its own SEA processes (and associated monitoring) requirements.

In particular, the SEA monitoring of the TCDP will inform monitoring at the LAP level for Roscrea and the other towns.

At lower tiers of the hierarchy, 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 and national/regional government departments and agencies) and the output of lower-tier environmental assessment and decision making (including a review of project approvals granted and associated documents and the output of any EIA monitoring programmes).

### 10.4 Reporting and Responsibility

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 specific to the Local Area Plan will be prepared as part of the reporting under the SEA monitoring programme for the TCDP, in order to ensure efficiency and effectiveness.

**Table 10.1 Indicators, Targets, Sources and Remedial Action**

Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action
Biodiversity, Flora and Fauna	BFF	<ul style="list-style-type: none"> <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 town's water bodies</li> <li>Compliance of planning permissions with Plan measures providing for the protection of Biodiversity and flora and fauna – see Chapter 7</li> </ul>	<ul style="list-style-type: none"> <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 Tipperary Heritage Plan 2017-2021</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 Chapter 7</li> </ul>	<ul style="list-style-type: none"> <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>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 style="list-style-type: none"> <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	PHH	<ul style="list-style-type: none"> <li>Implementation of Plan measures relating to the promotion of economic growth as provided for by Chapter 4</li> <li>Number of spatial concentrations of health problems arising from environmental factors resulting from development permitted under the Plan</li> <li>Modal shift to active travel and public transport in line with targets</li> <li>Number of spatial plans that include specific green infrastructure mapping</li> </ul>	<ul style="list-style-type: none"> <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 Chapter 4</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 style="list-style-type: none"> <li>Internal review of progress on implementing Plan objectives</li> <li>Consultations with the Health Service Executive and EPA</li> <li>CSO data</li> </ul>	<ul style="list-style-type: none"> <li>Where planning applications 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	<ul style="list-style-type: none"> <li>• Proportion of population growth occurring on infill and brownfield lands compared to greenfield</li> <li>• Volume of contaminated material generated from brownfield and infill</li> <li>• Number of AA determinations and environmental assessments undertaken to support applications for brownfield and infill development prior to planning permission</li> </ul>	<ul style="list-style-type: none"> <li>• Maintain built surface cover nationally to below the EU average of 4%</li> <li>• Achieve the 40% target for growth on infill as per NPF</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental Protection Agency (EPA), Geoportal</li> <li>• Internal monitoring of likely significant environmental effects of grants of permission (grant by grant)</li> </ul>	<p>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.</p>
Water	W	<ul style="list-style-type: none"> <li>• Status of water bodies as reported by the EPA Water Monitoring Programme for the WFD</li> <li>• Number of incompatible developments permitted within flood risk areas</li> </ul>	<ul style="list-style-type: none"> <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 River Basin Management Plan</li> <li>• Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk</li> </ul>	<ul style="list-style-type: none"> <li>• EPA Monitoring Programme for WFD compliance <sup>45</sup></li> <li>• Internal monitoring of likely significant environmental effects of grants of permission</li> </ul>	<ul style="list-style-type: none"> <li>• Where water bodies are failing to meet at least good status this will be investigated with the DHLGH 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.</li> <li>• Where planning applications are rejected due to insufficient capacity in the WWTP or failure of the WWTP to meet Emission Limit Values, the Council will consider whether it is necessary to coordinate a response with the Regional Assembly, EPA and Irish Water to achieve the necessary capacity.</li> <li>• Where planning applications are being permitted on flood zones, ensure that such grants are in compliance with the Flood Risk Management Guidelines and include appropriate flood risk mitigation and management measures.</li> </ul>

<sup>45</sup> Including monitoring of water quality and nitrogen deposition due to bioenergy and agricultural projects where available.

Material Assets	MA	<ul style="list-style-type: none"> <li>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</li> <li>Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the Plan</li> <li>Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures</li> </ul>	<ul style="list-style-type: none"> <li>To achieve the regeneration of sites as identified in Appendix 3.</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 wastewater infrastructure in line with the Roscrea DAP</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>	<ul style="list-style-type: none"> <li>Internal monitoring of likely significant environmental effects of grants of permission Consultations with the Irish Water (see Section 10.4)</li> <li>DHLGH in conjunction with Local Authorities</li> <li>CSO data</li> <li>Monitoring of Tipperary County Council's Climate Change Adaptation Strategy 2019-2024</li> </ul>	<ul style="list-style-type: none"> <li>Where planning applications are rejected due to insufficient capacity in the WWTP or failure of the WWTP to meet Emission Limit Values, the Council will consider whether it is necessary to coordinate 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 DHLGH, DECC and NTA to develop a tailored response.</li> </ul>
Air	A	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>CSO data</li> <li>Data from the National Travel Survey</li> <li>EPA Air Quality Monitoring</li> <li>Consultations with Department of Transport and Department of Environment, Climate and Communications (see Section 10.4)</li> </ul>	<ul style="list-style-type: none"> <li>Where proportion of population shows increase in private car use above CSO 2016 figures, Council will coordinate with the Regional Assembly, DHLGH, DECC and NTA to develop a tailored response. See also entry under Population and human health above</li> </ul>

Climatic Factors <sup>46</sup>	C	<ul style="list-style-type: none"> <li>• Implementation of Plan measures relating to climate reduction targets</li> <li>• A competitive, low-carbon, climate-resilient and environmentally sustainable economy</li> <li>• Share of renewable energy in transport</li> <li>• Carbon dioxide (CO<sub>2</sub>) emissions across the electricity generation, built environment and transport sectors</li> <li>• Energy consumption, the uptake of renewable options and solid fuels for residential heating</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 style="list-style-type: none"> <li>• For review of progress on implementing Plan objectives to demonstrate successful implementation of measures relating to climate reduction targets, including renewable energy production</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 facilitating the development of electricity charging and transmission infrastructure, in compliance with the provisions of the Plan</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> <li>• Decrease in the proportion of journeys made by residents of the Town using private fossil fuel-based car compared to 2016 levels</li> <li>• Increase in the proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures</li> </ul>	<ul style="list-style-type: none"> <li>• Internal monitoring of likely significant environmental effects of grants of permission</li> <li>• Monitoring of Tipperary County Council's Climate Change Adaptation Strategy 2019-2024</li> <li>• EPA Annual National Greenhouse Gas Emissions Inventory reporting</li> <li>• Climate Action Regional Office</li> <li>• Consultations with DECC (at monitoring evaluation - see Section 10.4)</li> <li>• CSO data</li> <li>• Monitoring of Tipperary County Council's Climate Change Adaptation Strategy 2019-2024</li> <li>• CSO data</li> <li>• Monitoring of Tipperary County Council's Climate Change Adaptation Strategy 2019-2024</li> </ul>	<ul style="list-style-type: none"> <li>• Review internal systems</li> <li>• Where targets are not achieved, the Council will liaise with the Regional Assembly and the Eastern and Midlands Climate Action Regional Office to establish reasons and develop solutions.</li> <li>• Where trends toward carbon reduction are not recorded, the Council will liaise with the Regional Assembly and the Eastern and Midlands Climate Action Regional Office to establish reasons and develop solutions.</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 DHLGH, DECC and NTA to develop a tailored response.</li> </ul>
Cultural Heritage	CH	<ul style="list-style-type: none"> <li>• 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</li> <li>• Percentage of entries to the Record of Protected Structures and Architectural Conservation Areas and their context protected from significant adverse effects arising from new</li> </ul>	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>• Internal monitoring of likely significant environmental effects of grants of permission</li> <li>• Consultation with DHLGH (see Section 10.4).</li> </ul>	<ul style="list-style-type: none"> <li>• 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, Fáilte Ireland and the National Monuments Service and other stakeholders, as relevant, to address pressures through additional mitigation.</li> </ul>

<sup>46</sup> Please also refer to relevant legislation and requirements under Section 4.10, Section 8.6, Section 9 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.

		development granted permission under the Plan			
Landscape	L	<ul style="list-style-type: none"> <li>• Number of developments permitted that result in avoidable adverse visual impacts on the landscape, especially with regard to landscape designations, resulting from development which is granted permission under the Plan</li> </ul>	<ul style="list-style-type: none"> <li>• Minimise the impact of developments permitted which result in avoidable adverse visual impacts on the landscape, especially with regard to landscape designations, resulting from development which is granted permission under the Plan</li> </ul>	<ul style="list-style-type: none"> <li>• Internal monitoring of likely significant environmental effects of grants of permission</li> </ul>	<ul style="list-style-type: none"> <li>• 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</li> </ul>

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

This appendix is not intended to be a full and comprehensive review of EU Directives, 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
International/European Level SEA Directive (2001/42/EC)	<ul style="list-style-type: none"> <li>Contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Carry out an environmental assessment for plans or programmes referred to in Articles 2 to 4 of the Directive.</li> <li>Prepare an environmental report which identifies, describes and evaluates the likely significant effects on the environment of implementing the plan or programme and reasonable alternatives that consider the objectives and the geographical scope of the plan or programme.</li> <li>Consult with relevant authorities, stakeholders and public allowing sufficient time to make a submission.</li> <li>Consult other Member States where the implementation of a plan or programme is likely to have transboundary environmental effects.</li> <li>Inform relevant authorities and stakeholders on the decision to implement the plan or programme.</li> <li>Issue a statement to include requirements detailed in Article 9 of the Directive.</li> <li>Monitor and mitigate significant environmental effects identified by the assessment.</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 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.
EIA Directive (2011/92/EU as amended by 2014/52/EU)	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>All projects listed in Annex I are considered as having significant effects on the environment and require an EIA.</li> <li>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.</li> <li>The environmental impact assessment shall identify, describe and assess in an appropriate manner, in the light of each individual case and in accordance with Articles 4 to 12, the direct and indirect effects of a project on the following factors: human beings, fauna and flora, soil, water, air, climate and the landscape, material assets and the cultural heritage, the interaction between each factor.</li> <li>Consult with relevant authorities, stakeholders and public allowing sufficient time to make a submission before a decision is made.</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 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.
Habitats Directive (92/43/EEC)	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 listed in Annex I and habitats of the species listed in Annex II, to enable the natural habitat types and the species’ habitats concerned to be maintained or, where appropriate, restored at a favourable conservation status in their natural range.</li> <li>Carry out comprehensive assessment of habitat types and species present.</li> <li>Establish a system of strict protection for the animal species and plant species listed in Annex IV.</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 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.
Birds Directive (2009/147/EC)	<ul style="list-style-type: none"> <li>Conserve all species of naturally occurring birds in the wild state including their eggs, nests and habitats.</li> <li>Protect, manage and control these species and comply with regulations relating to their exploitation.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <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 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.
EU Nitrates Directive (91/676/EEC)	<ul style="list-style-type: none"> <li>Reducing water pollution caused or induced by nitrates from agricultural sources and – preventing further such pollution.</li> </ul>	<p>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:</p> <ul style="list-style-type: none"> <li>a limit on the amount of livestock manure applied to the land each year</li> <li>set periods when land spreading is prohibited due to risk</li> <li>set capacity levels for the storage of livestock manure</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 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.

EU Integrated Pollution Prevention Control Directive (2008/1/EC)	<ul style="list-style-type: none"> <li>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.</li> </ul>	<p>The IPPC Directive is based on several principles:</p> <ul style="list-style-type: none"> <li>an integrated approach</li> <li>best available techniques,</li> <li>flexibility; and</li> <li>public participation</li> </ul>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.</p>
EU Plant Protection (products) Directive 2009/127/EC	<ul style="list-style-type: none"> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>The Framework Directive applies to pesticides which are plant protection products.</li> <li>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.</li> </ul>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.</p>
EU Renewables Directive (2009/28/EC)	<ul style="list-style-type: none"> <li>The Renewable Energy Directive establishes an overall policy for the production and promotion of energy from renewable sources in the EU.</li> <li>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.</li> <li>All EU countries must also ensure that at least 10% of their transport fuels come from renewable sources by 2020.</li> </ul>	<ul style="list-style-type: none"> <li>The Directive promotes cooperation amongst EU countries (and with countries outside the EU) to help them meet their renewable energy targets.</li> <li>The Directive specifies national renewable energy targets for each country, taking into account its starting point and overall potential for renewables.</li> <li>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.</li> <li>Progress towards national targets is measured every two years when EU countries publish national renewable energy progress reports.</li> </ul>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.</p>
Indirect Land Use Change Directive (2012/0288 (COD))	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>Limit the contribution that conventional biofuels (with a risk of ILUC emissions) make towards attainment of the targets in the Renewable Energy Directive;</li> <li>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 1<sup>st</sup> July 2014;</li> <li>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;</li> <li>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.</li> </ul>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.</p>
Alternative Fuels Infrastructure Directive (2014/94/EU)	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.</p>
Climate Action and Low-Carbon Development Act 2015	<ul style="list-style-type: none"> <li>The 2015 Act provides the statutory basis for the national transition objective laid out in the <a href="#">national policy position</a>. As provided for in the Act, the Minister for the Environment, Climate and Communications must submit to government a series of successive plans and frameworks which will ensure the national transition objective is achieved by the implementation of cost-effective measures.</li> </ul>	<ul style="list-style-type: none"> <li>Section 14(1) of the Climate Action and Low-Carbon Development Act 2015 provides that an Annual Transition Statement must be presented annually to both Houses of the Oireachtas by the Minister for the Environment, Climate and Communications. Annual Transition Statements include an overview of mitigation and adaptation policy measures to help reduce greenhouse gas emissions and adapt to the effects of climate change. An Annual Transition Statement also provides a summary of current and projected greenhouse gas emissions published by the Environmental Protection Agency, and includes a compliance report with State obligations under EU law or an international agreement.</li> </ul>	<p>The Climate Action and Low Carbon Development (Amendment) Act 2021 requires planning authorities to incorporate provisions for climate mitigation and adaption as a key element of plan making</p>
EU Energy Efficiency Directive (2012/27/EU)	<ul style="list-style-type: none"> <li>Establishes a set of binding measures to help the EU reach its 20% energy efficiency target by 2020.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <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> </ul>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.</p>



		<ul style="list-style-type: none"> <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>	
EU Seveso Directive (2012/18/EU)	<ul style="list-style-type: none"> <li>• 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 manner.</li> </ul>	<p>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:</p> <ul style="list-style-type: none"> <li>• Classification, labelling and packaging of chemicals;</li> <li>• The Union's Civil Protection Mechanism;</li> <li>• The Security Union Agenda including CBRN-E and Protection of critical infrastructure;</li> <li>• Policy on environmental liability and on the protection of the environment through criminal law;</li> <li>• Safety of offshore oil and gas operations.</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 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.
European Union Biodiversity Strategy to 2020	<ul style="list-style-type: none"> <li>• Aims to halt or reverse biodiversity loss and speed up the EU's transition towards a resource efficient and green economy.</li> <li>• Halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, and restoring them in so far as feasible.</li> </ul>	<ul style="list-style-type: none"> <li>• Outlines six targets and twenty actions to aid European Union in halting the loss to biodiversity and eco-system services.</li> <li>• The six targets cover: <ul style="list-style-type: none"> <li>○ Full implementation of EU nature legislation to protect biodiversity</li> <li>○ Maintaining, enhancing and protecting for ecosystems, and green infrastructure</li> <li>○ Ensuring sustainable agriculture, and forestry</li> <li>○ Sustainable management of fish stocks</li> <li>○ Reducing invasive alien species</li> <li>○ Addressing the global need to contribute towards averting global biodiversity loss</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 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.
Biodiversity Strategy for 2030 - Bringing nature back into our lives (European Commission, 2020)	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<p>The Strategy contains specific commitments and actions to be delivered by 2030, including:</p> <ul style="list-style-type: none"> <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 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.
EU Green Infrastructure Strategy	Aims to create a robust enabling framework in order to promote and facilitate Green Infrastructure (GI) projects.	<ul style="list-style-type: none"> <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 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.
UNESCO (1972) The Convention for the Protection of the World Cultural and Natural Heritage	<ul style="list-style-type: none"> <li>• links concepts of nature conservation and the preservation of cultural properties; and</li> <li>• recognizes the way in which people interact with nature, and the fundamental need to preserve the balance between the two.</li> </ul>	<ul style="list-style-type: none"> <li>• sets out the duties of States Parties in identifying potential sites and their role in protecting and preserving them;</li> <li>• each country pledges to conserve not only the World Heritage sites situated on its territory, but also to protect its national heritage;</li> <li>• encourages to integrate the protection of the cultural and natural heritage into regional planning programmes, set up staff and services at their sites, undertake scientific and technical conservation research and adopt measures which give this heritage a function in the day-to-day life of the community.</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 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.
UN (1992) The Convention on Biological Diversity	An overall objective is to develop national strategies for the conservation and sustainable use of biological diversity.	<p>The Convention has three main goals:</p> <ul style="list-style-type: none"> <li>• the conservation of biological diversity (or biodiversity);</li> <li>• the sustainable use of its components; and</li> <li>• the fair and equitable sharing of benefits arising from genetic 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 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.
UN (1992) Framework Convention on Climate Change	It is aimed at stabilising greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.	The Convention acknowledges the vulnerability of all countries to the effects of climate change and calls for special efforts to ease the consequences, especially in developing countries which lack the resources to do so on their own.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.

UN Kyoto Protocol (2 <sup>nd</sup> Kyoto Period), the Second European Climate Change Programme (ECCP II), Paris climate conference (COP21) 2015 (Paris Agreement)	<p>The UN Kyoto Protocol set of policy measures to reduce greenhouse gas emissions.</p> <p>The Second European Climate Change Programme (ECCP II) aims to identify and develop all the necessary elements of an EU strategy to implement the Kyoto Protocol.</p> <p>At the Paris climate conference (COP21) in December 2015, 195 countries adopted the first-ever universal, legally binding global climate deal. The agreement sets out a global action plan to put the world on track to avoid dangerous climate change by limiting global warming to well below 2°C.</p>	<ul style="list-style-type: none"> <li>The Kyoto Protocol is implemented through the European Climate Change Programme (ECCP II).</li> <li>EU member states implement measures to improve on or compliment the specified measures and policies arising from the ECCP.</li> <li>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.</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 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.
EU 2020 Climate and Energy Package	<ul style="list-style-type: none"> <li>Binding legislation which aims to ensure the European Union meets its climate and energy targets for 2020.</li> <li>Aims to achieve a 20% reduction in EU greenhouse gas emissions from 1990 levels.</li> <li>Aims to raise the share of EU energy consumption produced from renewable resources to 20%.</li> <li>Achieve a 20% improvement in the EU's energy efficiency.</li> </ul>	<p>Four pieces of complimentary legislation:</p> <ul style="list-style-type: none"> <li>Reform of the EU Emissions Trading System (EU ETS) to include a cap on emission allowances in addition to existing system of national caps.</li> <li>Member States have agreed national targets for non-EU ETS emissions from countries outside the EU.</li> <li>Meet the national renewable energy targets of 16% for Ireland by 2020.</li> <li>Preparing a legal framework for technologies in carbon capture and storage.</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 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.
EU 2030 Framework for Climate and Energy	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<p>To meet the targets, the European Commission has proposed the following policies for 2030:</p> <ul style="list-style-type: none"> <li>A reformed EU emissions trading scheme (ETS).</li> <li>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.</li> <li>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.</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 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.
The Clean Air for Europe Directive (2008/50/EC) (EU Air Framework Directive)  Fourth Daughter Directive (2004/107/EC)	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 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.
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.	<p>The Directive requires competent authorities in Member States to:</p> <ul style="list-style-type: none"> <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> </ul> <p>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.</p>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.
Floods Directive (2007/60/EC)	<ul style="list-style-type: none"> <li>Establishes a framework for the assessment and management of flood risks</li> <li>Reduce adverse consequences for human health, the environment, cultural heritage and economic activity associated with floods in the Community</li> </ul>	<ul style="list-style-type: none"> <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 Articles listed above.</li> <li>Inform the public and allow the public to participate in planning process.</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 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.

Water Framework Directive (2000/60/EC)	<ul style="list-style-type: none"> <li>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.</li> <li>Preserve and prevent the deterioration of water status and where necessary improve and maintain "good status" of water bodies.</li> <li>Promote sustainable water usage.</li> <li>The Water Framework Directive repealed the following Directives: <ul style="list-style-type: none"> <li>The Drinking Water Abstraction Directive</li> <li>Sampling Drinking Water Directive</li> <li>Exchange of Information on Quality of Surface Freshwater Directive</li> <li>Shellfish Directive</li> <li>Freshwater Fish Directive</li> <li>Groundwater (Dangerous Substances) Directive</li> <li>Dangerous Substances Directive</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <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 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.
Groundwater Directive (2006/118/EC)	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>Meet minimum groundwater standards listed in Annex 1 of Directive.</li> <li>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.</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 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.
Drinking Water Directive (98/83/EC)	<ul style="list-style-type: none"> <li>Improve and maintain the quality of water intended for human consumption.</li> <li>Protect human health from the adverse effects of any contamination of water intended for human consumption by ensuring that it is wholesome and clean.</li> </ul>	<ul style="list-style-type: none"> <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 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.
Urban Waste Water Treatment Directive (91/271/EEC)	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 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.
Environmental Liability Directive (2004/35/EC) as amended by Directive 2006/21/EC, Directive 2009/31/EC and Directive 2013/30/EU	<ul style="list-style-type: none"> <li>Establish a framework of environmental liability based on the 'polluter-pays' principle, to prevent and remedy environmental damage.</li> </ul>	<ul style="list-style-type: none"> <li>Relates to environmental damage caused by any of the occupational activities listed in Annex III, and to any imminent threat of such damage occurring by reason of any of those activities; damage to protected species and natural habitats caused by any occupational activities other than those listed in Annex III, and to any imminent threat of such damage occurring by reason of any of those activities, whenever the operator has been at fault or negligent.</li> <li>Where environmental damage has not yet occurred but there is an imminent threat of such damage occurring, the operator shall, without delay, take the necessary preventive measures.</li> <li>Where environmental damage has occurred the operator shall, without delay, inform the competent authority of all relevant aspects of the situation and take all practicable steps to immediately control, contain, remove or otherwise manage the relevant contaminants and/or any other damage factors in order to limit or to prevent further environmental damage and adverse effects on human health or further impairment of services and the necessary remedial measures, in accordance with Article 7.</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 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.

		<ul style="list-style-type: none"> <li>The operator shall bear the costs for the preventive and remedial actions taken pursuant to this Directive.</li> <li>The competent authority shall be entitled to initiate cost recovery proceedings against the operator.</li> <li>The operator may be required to provide financial security guarantees to ensure their responsibilities under the directive are met.</li> <li>The Environmental Liability Directive has been amended through a number of Directives. Implementation of the Environmental Liability Directive is contributed towards by a Multi-Annual Work Programme (MAWP) 'Making the Environmental Liability Directive more fit for purpose' that is updated annually to changing developments, growing knowledge and new needs.</li> </ul>	
European Convention on the Protection of the Archaeological Heritage (Valletta 1992)	<ul style="list-style-type: none"> <li>The aim of this (revised) Convention is to protect the archaeological heritage as a source of the European collective memory and as an instrument for historical and scientific study.</li> </ul>	The Valletta Convention makes the conservation and enhancement of the archaeological heritage one of the goals of urban and regional planning policies. The Convention sets guidelines for the funding of excavation and research work and publication of research findings. It also deals with public access, in particular to archaeological sites, and educational actions to be undertaken to develop public awareness of the value of the archaeological heritage. It also constitutes an institutional framework for pan-European co-operation on the archaeological heritage, entailing a systematic exchange of experience and experts among the various States.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.
Convention of the Protection of the Architectural Heritage of Europe (Granada 1995)	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <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 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.
ICOMOS (2011) Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes ('Dublin Principles')	<ul style="list-style-type: none"> <li>It is aimed to assist in the documentation, protection, conservation and appreciation of industrial heritage as part of the heritage of human societies around the World.</li> </ul>	<ul style="list-style-type: none"> <li>(I) Document and understand industrial heritage structures, sites, areas and landscapes and their values;</li> <li>(II) Ensure effective protection and conservation of the industrial heritage structures, sites, areas and landscapes;</li> <li>(III) Conserve and maintain the industrial heritage structures, sites, areas and landscapes; and</li> <li>(IV) Present and communicate the heritage dimensions and values of industrial structures, sites, areas and landscapes to raise public and corporate awareness, and support training and research.</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 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.
Council of Europe Framework Convention on the Value of Cultural Heritage for Society (Faro 2005)	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 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.
European Landscape Convention 2000	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Promote protection, management and planning of landscapes.</li> <li>Organise European co-operation on landscape issues.</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 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.
The Seventh Environmental Action Programme (EAP) of the European Community (2013-2020)	<p>It identifies three key objectives:</p> <ul style="list-style-type: none"> <li>to protect, conserve and enhance the Union's natural capital</li> <li>to turn the Union into a resource-efficient, green, and competitive low-carbon economy</li> </ul>	<p>Four so called "enablers" will help Europe deliver on these objectives (goals):</p> <ul style="list-style-type: none"> <li>Better implementation of legislation.</li> <li>Better information by improving the knowledge base.</li> <li>More and wiser investment for environment and climate policy.</li> <li>Full integration of environmental requirements and considerations into other policies.</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 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

	<ul style="list-style-type: none"> <li>to safeguard the Union's citizens from environment-related pressures and risks to health and wellbeing</li> </ul>	<p>Two additional horizontal priority objectives complete the programme:</p> <ul style="list-style-type: none"> <li>To make the Union's cities more sustainable.</li> <li>To help the Union address international environmental and climate challenges more effectively.</li> </ul>	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)	<p>The convention has three main aims:</p> <ul style="list-style-type: none"> <li>to conserve wild flora and fauna and their natural habitats</li> <li>to promote cooperation between states</li> <li>to give particular attention to endangered and vulnerable species including endangered and vulnerable migratory species</li> </ul>	<p>The Parties under the convention recognise the intrinsic value of nature, which needs to be preserved and passed to future generations, they also:</p> <ul style="list-style-type: none"> <li>Seek to ensure the conservation of nature in their countries, paying particular attention to planning and development policies and pollution control.</li> <li>Look at implementing the Bern Convention in central Eastern Europe and the Caucasus.</li> <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>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.
Bali Road Map (2007)	<p>The overall goals of the project are twofold:</p> <ul style="list-style-type: none"> <li>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</li> <li>To assess investment and financial flows to address climate change for up to three key sectors and/or economic activities.</li> </ul>	<p>The Bali Action Plan is centred on four main building Blocks:</p> <ul style="list-style-type: none"> <li>mitigation</li> <li>adaptation</li> <li>technology</li> <li>financing</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 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.
Cancun Agreements (2010)	<p>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:</p> <ul style="list-style-type: none"> <li>Mitigation</li> <li>Transparency of actions</li> <li>Technology</li> <li>Finance</li> <li>Adaptation</li> <li>Forests</li> <li>Capacity building</li> </ul>	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 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.
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.	<ul style="list-style-type: none"> <li>Set out a timetable to adopt a universal climate agreement by 2015 (to come into effect in 2020);</li> <li>Complete the work under Bali Action Plan and to focus on new completing new targets;</li> <li>Strengthen the aim to cut greenhouse gases and help vulnerable countries to adapt;</li> <li>Amend Kyoto Protocol to include a new commitment period for cutting down the greenhouse gases emissions; and</li> <li>Provide the financial and technology support and new institutions to allow clean energy investment and sustainable growth in developing countries.</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 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.
EU Common Agricultural Policy	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 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.
EU REACH Regulation (EC 1907/2006)	<ul style="list-style-type: none"> <li>Aims to improve the protection of human health and the environment through the better and earlier identification of the intrinsic properties of chemical substances.</li> </ul>	<p>The aims are achieved by applying REACH, namely:</p> <ul style="list-style-type: none"> <li>Registration,</li> <li>Evaluation,</li> <li>Authorisation; and</li> <li>Restriction of chemicals.</li> </ul> <p>REACH also aims to enhance innovation and competitiveness of the EU chemicals industry.</p>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.
Stockholm Convention	<ul style="list-style-type: none"> <li>The objective of the Stockholm Convention is to protect human health and the environment from persistent organic pollutants.</li> </ul>	<ul style="list-style-type: none"> <li>Prohibit and/or eliminate the production and use, as well as the import and export, of the intentionally produced Persistent Organic Pollutants (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</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 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.

		and monitoring, technical assistance, financial resources and mechanisms, reporting, effectiveness evaluation and non-compliance	
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".	Under the "three pillars" of the Convention, the Contracting Parties commit to: <ul style="list-style-type: none"> <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>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.
European 2020 Strategy for Growth	Europe 2020 sets out a vision of Europe's social market economy for the 21st century and puts forward three mutually reinforcing priorities: <ul style="list-style-type: none"> <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>	In order to reach these priorities, the Commission proposes five quantitative targets to fulfil by 2020: <ol style="list-style-type: none"> <li>1. 75 % of the population aged 20-64 should be employed;</li> <li>2. 3% of the EU's GDP should be invested in R&amp;D;</li> <li>3. the "20/20/20" climate/energy targets should be met (including an increase to 30% of emissions reduction if the conditions are right);</li> <li>4. the share of early school leavers should be under 10% and at least 40% of the younger generation should have a tertiary degree;</li> <li>5. 20 million less people should be at risk of poverty.</li> </ol>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.
European Parliament resolutions, including the European Green Deal (EGD) 2020	The deal sets out how to make Europe the first climate-neutral continent by 2050, boosting the economy, improving people's quality of life, caring for nature and leaving no one behind.	<ul style="list-style-type: none"> <li>• It sets out a roadmap with actions to boost the efficient use of resources by moving to a clean, circular economy, restore biodiversity and cut pollution.</li> <li>• It outlines investments required, financing tools available and explains how to ensure a just and inclusive transition.</li> <li>• In order to meet the goal to become climate neutral by 2050 as part of the European Green Deal, the European Union (EU) Commission proposed on 4th March 2020 to bring about the first European Climate Law and legally bind the target of net zero greenhouse gas emissions by 2050.</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 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.
EU (2018) Clean Air Policy Package	Aims to substantially reduce air pollution across the EU.	The proposed strategy sets out objectives for reducing the health and environmental impacts of air pollution by 2030, and contains legislative proposals to implement stricter standards for emissions and air pollution.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.
Leaders Pledge for Nature 2020	Political leaders (including Taoiseach Michael Martin) participating in the United Nations Summit on Biodiversity in September 2020, representing 75 countries from all regions and the European Union, have committed to reversing biodiversity loss by 2030.	As part of the UN Decade of Action to achieve sustainable development, the leaders commit to achieve the vision of Living in Harmony with Nature by 2050 by undertaking ten actions, including: <ul style="list-style-type: none"> <li>• Putting biodiversity, climate, and the environment at the heart of COVID-19 recovery strategies and investments as well as national and international development and cooperation;</li> <li>• Developing and implementing an ambitious and transformational post-2020 global biodiversity framework for adoption at the 15th meeting of the Conference of the Parties (COP 15) to the UN Convention on Biological Diversity (CBD) in Kunming, China, as a key instrument to reach the SDGs;</li> <li>• Raising ambition and aligning domestic climate policies with the Paris Agreement on climate change, with enhanced nationally determined contributions (NDCs) and long-term strategies consistent with the temperature goals of the Paris Agreement, and the objective of net zero greenhouse gas (GHG) emissions by mid-century, and strengthen climate resilience of economies and ecosystems; and</li> <li>• Mainstream biodiversity into relevant sectoral and cross-sectoral policies at all levels, including in food production, agriculture, fisheries and forestry, energy, tourism, infrastructure and extractive industries, and trade and supply chains, as well as into key international agreements and processes.</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 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.
National Level			
Ireland 2040 - Our Plan, the National Planning Framework and the National Development Plan	<ul style="list-style-type: none"> <li>• The National Planning Framework is the Government's high-level 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.</li> <li>• 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.</li> </ul>	National Strategic Outcomes as follows: <ol style="list-style-type: none"> <li>1. Compact Growth</li> <li>2. Enhanced Regional Accessibility</li> <li>3. Strengthened Rural Economies and Communities</li> <li>4. Sustainable Mobility</li> <li>5. A Strong Economy, supported by Enterprise, Innovation and Skills</li> <li>6. High-Quality International Connectivity</li> <li>7. Enhanced Amenity and Heritage</li> <li>8. Transition to a Low-Carbon and Climate-Resilient Society</li> <li>9. Sustainable Management of Water and other Environmental Resources</li> <li>10. Access to Quality Childcare, Education and Health Services</li> </ol>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.

Planning, Land Use and Transport Outlook 2040 [in preparation]	The PLUTO will take account of forecasted future economic and 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.	In preparation	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.
Planning and Development Act 2000 (as amended)	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <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 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.
European Communities (Environmental Assessment of Certain Plans and Programmes Regulations 2004 (S.I. 435 of 2004), as amended by S.I. 200 of 2011	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <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 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.
European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2011, as amended)	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <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 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.
Waste Management Act 1996, as amended	<ul style="list-style-type: none"> <li>To make provision in relation to the prevention, management 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.</li> </ul>	<ul style="list-style-type: none"> <li>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.</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 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.
European Communities Environmental Objectives Regulations 2009 (S.I. 296 of 2009)	<ul style="list-style-type: none"> <li>The purpose of these Regulations is to support the achievement of favourable conservation status for freshwater pearl mussels</li> </ul>	<ul style="list-style-type: none"> <li>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).</li> <li>Require the production of sub-basin management plans with programmes of measures to achieve these objectives.</li> <li>Set out the duties of public authorities in respect of the sub-basin management plans and programmes of measure.</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 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.
European Communities Environmental Objectives (Groundwater) Regulations 2010 (S.I. 9 of 2010), as amended (S.I. No. 366 of 2016)	<ul style="list-style-type: none"> <li>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.</li> </ul>	<p>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.</p> <ul style="list-style-type: none"> <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 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.
European Communities (Good Agricultural Practice	<ul style="list-style-type: none"> <li>These Regulations, which give effect to Ireland's 3<sup>rd</sup> Nitrates Action Programme, provide statutory</li> </ul>	<p>The Regulations include measures such as:</p> <ul style="list-style-type: none"> <li>Periods when land application of fertilisers is prohibited</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 in-

for Protection of Waters) Regulations 2014 (S.I. No. 31 of 2014)	support for good agricultural practice to protect waters against pollution from agricultural sources	<ul style="list-style-type: none"> <li>Limits on the land application of fertilisers</li> <li>Storage requirements for livestock manure; and</li> <li>Monitoring of the effectiveness of the measures in terms of agricultural practice and impact on water quality.</li> </ul>	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.
Climate Action and Low Carbon Development Act 2015, as amended	<ul style="list-style-type: none"> <li>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.</li> </ul>	<p>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:</p> <ul style="list-style-type: none"> <li>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,</li> <li>The policy of the Government on climate change,</li> <li>Climate justice,</li> <li>Any existing obligation of the State under the law of the European Union or any international agreement referred to in section 2; and</li> <li>The most recent national greenhouse gas emissions inventory and projection of future greenhouse gas emissions, prepared by the Agency.</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 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.
Climate Action Plans	<ul style="list-style-type: none"> <li>The Climate Action Plan 2021 and the emerging Climate Action Plan 2023 provide detailed plans for taking decisive action to achieve a 51% reduction in overall greenhouse gas emissions by 2030 and setting Ireland on a path to reach net-zero emissions by no later than 2050, as committed to in the Programme for Government and set out in the Climate Act 2021.</li> </ul>	The Climate Action Plan 2021 and the emerging Climate Action Plan 2023 list the actions needed to deliver on our climate targets and sets indicative ranges of emissions reductions for each sector of the economy. Updates are made to the Climate Action Plans periodically 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 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.
The Sustainable Development Goals National Implementation Plan (2018 – 2020)	<ul style="list-style-type: none"> <li>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).</li> <li>The Plan provides an 'SDG Matrix' which identifies the responsible Government Departments for each of the 169 targets. It also includes an 'SDG Policy Map' indicating the relevant national policies for each of the targets.</li> </ul>	<p>The Plan identifies four strategic priorities to guide implementation:</p> <ul style="list-style-type: none"> <li>Awareness: raise public awareness of the SDGs;</li> <li>Participation: provide stakeholders opportunities to engage and contribute to follow-up and review processes, and further develop national implementation of the Goals;</li> <li>Support: encourage and support efforts of communities and organisations to contribute towards meeting the SDGs, and foster public participation; and</li> <li>Policy alignment: develop alignment of national policy with the SDGs and identify opportunities for policy coherence.</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 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.
Infrastructure and Capital Investment Plan (2016-2021)	<ul style="list-style-type: none"> <li>€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 2021 will help to lay the foundations for continued growth in Ireland.</li> </ul>	<ul style="list-style-type: none"> <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> <li>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.</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 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.
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 European 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 style="list-style-type: none"> <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 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.
Ireland's National Renewable Energy Action Plan 2010 (Irish Government submission to the European Commission)	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>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.</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 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.



Strategy for Renewable Energy (2012-2020)	<ul style="list-style-type: none"> <li>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 cost-efficient manner for consumers.</li> <li>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.</li> </ul>	<p>This document sets out five strategic goals, reflecting the key dimensions of the renewable energy challenge to 2020:</p> <ul style="list-style-type: none"> <li>Increasing on and offshore wind,</li> <li>Building a sustainable bioenergy sector,</li> <li>Fostering R&amp;D in renewables such as wave &amp; tidal,</li> <li>Growing sustainable transport; and</li> <li>Building out robust and efficient networks.</li> </ul>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.</p>
Governments White Paper 'Ireland's Transition to a Low Carbon Energy Future' (2015 – 2030)	<p>The White Paper sets out a vision and a framework to guide Irish energy policy between now and 2030. A complete energy policy update informed by the vision to transform Ireland into a low carbon society and economy by 2050.</p>	<p>2030 will represent a significant milestone, meaning:</p> <p>Reduced GHG emissions from the energy sector by between 80% and 95% Ensuring that secure supplies of competitive and affordable energy remain available to citizens and businesses.</p>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.</p>
National Policy Position on Climate Action and Low Carbon Development (2014)	<ul style="list-style-type: none"> <li>The National Policy Position provides a high-level policy direction for the adoption and implementation by Government of plans to enable the State to move to a low carbon economy by 2050.</li> <li>Statutory authority for the plans is set out in the Climate Action and Low Carbon Development Act 2015.</li> </ul>	<p>National climate policy in Ireland:</p> <ul style="list-style-type: none"> <li>Recognises the threat of climate change for humanity;</li> <li>Anticipates and supports mobilisation of a comprehensive international response to climate change, and global transition to a low-carbon future;</li> <li>Recognises the challenges and opportunities of the broad transition agenda for society; and</li> <li>Aims, as a fundamental national objective, to achieve transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050.</li> </ul>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.</p>
National Clean Air Strategy [in preparation]	<p>The Clean Air Strategy will provide the strategic policy 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.</p>	<ul style="list-style-type: none"> <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>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.</p>
EirGrid's Grid25 Strategy and associated Grid25 Implementation Programme 2017-2022	<p>EirGrid's mission is to develop, maintain and operate a safe, secure, reliable, economical and efficient transmission system for Ireland; <i>"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."</i></p>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.</p>
All Island Grid Study 2008	<ul style="list-style-type: none"> <li>The All Island Grid Study is the first comprehensive assessment of the ability of the electrical power system and, as part of that, the transmission network ("the grid") on the island of Ireland to absorb large amounts of electricity produced from renewable energy sources.</li> <li>The objective of this five-part study is to assess the technical feasibility and the relative costs and benefits associated with various scenarios for increased shares of electricity sourced from renewable energy in the all island power system.</li> </ul>	<p>Key conclusions of the study:</p> <ul style="list-style-type: none"> <li>The presented results indicate that the differences in cost between the highest cost and the lowest cost portfolios are low (7%), given the assumptions made and costs included in the Study.</li> <li>All but the high coal-based portfolio lead to significant reductions of CO<sub>2</sub> emissions compared to portfolio 1</li> <li>All but the high coal-based portfolio lead to reductions on the dependency of the all island system on fuel and electricity imports.</li> <li>The limitations of the study may overstate the technical feasibility of the portfolios analysed and could impact the costs and benefits resulting. Further work is required to understand the extent of such impact.</li> <li>Timely development of the transmission networks, requiring means to address the planning challenge, is a precondition for implementation of the portfolios considered.</li> <li>Market mechanisms must facilitate the installation of complementary, i.e. flexible, dispatchable plant, so as to maintain adequate levels of system security.</li> </ul>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.</p>
Strategy for the Future Development of National and Regional Greenways (2018)	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>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;</li> <li>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;</li> <li>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</li> <li>Greenways that provide opportunities for the development of local businesses and economies, and</li> </ul>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.</p>

		<ul style="list-style-type: none"> <li>Greenways that are developed with all relevant stakeholders in line with an agreed code of practice.</li> </ul>	
National Water Resources Plan [in preparation]	<ul style="list-style-type: none"> <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 short, medium and long term whilst minimising the impact on the environment.</li> </ul>	<p>The key objectives of the Plan are to:</p> <ul style="list-style-type: none"> <li>Identify areas where there are current and future potential water supply shortfalls, taking into account normal and extreme weather conditions</li> <li>Assess the current and future water demand from homes, businesses, farms, and industry</li> <li>Consider the impacts of climate change on Ireland's water resources</li> <li>Develop a drought plan advising measures to be taken before and during drought events</li> <li>Develop a plan detailing how we deal with the material that is produced as a result of treating drinking water</li> <li>Identify, develop and assess options to help meet potential shortfalls in water supplies</li> <li>Assess the water resources available at a national level including lakes, rivers and groundwater</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 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.
National Strategic Plan for Aquaculture Development (2014-2020)	<i>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."</i>	<p>General development and growth objectives of marine and freshwater aquaculture (2014 – 2020):</p> <ul style="list-style-type: none"> <li>Strengthen the social, business and administrative environment for aquaculture development</li> <li>Increase in the total production to 24,050 tonnes while adhering to the principles of economic, social and ecological sustainability</li> <li>Improvement of the perception and increase in the national consumption of National products</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 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.
Construction 2020, A Strategy for a Renewed Construction Sector	<ul style="list-style-type: none"> <li>Construction 2020 sets out a package of measures agreed by the Government and is aimed at stimulating activity in the building industry.</li> <li>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.</li> </ul>	<p>This Strategy therefore addresses issues including:</p> <ul style="list-style-type: none"> <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> <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 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.
Sustainable Development: A Strategy for Ireland (1997)	<ul style="list-style-type: none"> <li>The overall aim of this Strategy is to ensure that economy 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.</li> </ul>	<ul style="list-style-type: none"> <li>The Strategy addresses all areas of Government policy, and of economic and societal activity, which impact on the environment. It seeks to re-orientate policies as necessary to ensure that the strong growth Ireland enjoys and seeks to maintain will be environmentally sustainable.</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 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.
National Landscape Strategy for Ireland 2015-2025 and National Landscape Character Assessment (pending preparation)	<ul style="list-style-type: none"> <li>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.</li> <li>Landscape Strategy Vision: <i>"Our landscape reflects and embodies our cultural values and our shared natural heritage 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."</i></li> </ul>	<p>The objectives of the National Landscape Strategy are to:</p> <ul style="list-style-type: none"> <li>Implement the European Landscape Convention by integrating landscape into the approach to sustainable development;</li> <li>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;</li> <li>Provide a policy framework, which will put in place measures at national, sectoral - including agriculture, tourism, energy, transport and marine - and local level, together with civil society, to protect, manage and properly plan through high quality design for the sustainable stewardship of the landscape;</li> <li>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.</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 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.
Ireland's National Waste Policy 2020 – 2025	The Policy sets out new targets to tackle waste and move towards a circular economy.	The plan includes halving our food waste by 2030, the introduction of a deposit and return scheme for plastic bottles and cans, a ban on certain single use plastics from July 2021, and a levy on disposable cups. Other measures include applying green criteria and circular economy principles in all public procurement, a waste recovery levy to encourage recycling, and ensuring all packaging is reusable or recyclable by 2030.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.
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	<p>The revised Plan makes 27 recommendations under the following topics:</p> <ul style="list-style-type: none"> <li>Prevention</li> <li>Collection</li> <li>Self-sufficiency</li> <li>Regulation</li> <li>Legacy issues</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 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

	<p>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:</p> <ul style="list-style-type: none"> <li>To prevent and reduce the generation of hazardous waste by industry and society generally;</li> <li>To maximise the collection of hazardous waste with a view to reducing the environmental and health impacts of any unregulated waste;</li> <li>To strive for increased self-sufficiency in the management of hazardous waste and to minimise hazardous waste export;</li> <li>To minimise the environmental, health, social and economic impacts of hazardous waste generation and management.</li> </ul>	<ul style="list-style-type: none"> <li>North-south cooperation</li> <li>Guidance and awareness</li> <li>Implementation</li> </ul>	<p>etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
Ministerial Guidelines such as Sustainable Rural Housing Guidelines and Flood Risk Management Guidelines	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.</p>
HSE Healthy Ireland Framework for Improved Health and Wellbeing 2013-2025	<ul style="list-style-type: none"> <li>The vision is: <i>"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."</i></li> </ul>	<p>These four goals are interlinked, interdependent and mutually supportive:</p> <ul style="list-style-type: none"> <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>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.</p>
Our Sustainable Future: A framework for Sustainable Development for Ireland 2012	<p>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.</p>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.</p>
Smarter Travel – A Sustainable Transport Future – A New Transport Policy for Ireland 2009 – 2020 (2009)	<ul style="list-style-type: none"> <li>Outlines a policy for how a sustainable travel and transport system can be achieved.</li> <li>Sets out five key goals: <ul style="list-style-type: none"> <li>To reduce overall travel demand.</li> <li>To maximise the efficiency of the transport network.</li> <li>To reduce reliance on fossil fuels.</li> <li>To reduce transport emissions.</li> <li>To improve accessibility to transport.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Others lower level aims include: <ul style="list-style-type: none"> <li>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</li> <li>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</li> <li>improving the fuel efficiency of motorised transport through improved fleet structure, energy efficient driving and alternative technologies</li> <li>strengthening institutional arrangements to deliver the targets</li> </ul> </li> </ul>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.</p>
Investing in our Future: A Strategic Framework for Investment in Land Transport (SFILT) – Department of Transport, Tourism and Sport	<ul style="list-style-type: none"> <li>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.</li> </ul>	<p>The three priorities stated in SFILT are:</p> <ul style="list-style-type: none"> <li>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);</li> <li>Priority 2: Address urban congestion; and</li> <li>Priority 3: Maximise the value of the road network.</li> </ul> <p>In delivering on the steady state maintenance objective set out in SFILT, the Plan includes for:</p> <ul style="list-style-type: none"> <li>Planned replacement programme for the bus fleet operated under Public Service Obligation ("PSO") contracts;</li> <li>Tram refurbishment and asset renewal in the case of light rail; and</li> <li>To the extent within the Authority' remit, support for the operation of the existing rail network within the GDA.</li> </ul>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.</p>
Delivering a Sustainable Energy Future for Ireland – The Energy Policy Framework 2007 – 2020 (2007)	<ul style="list-style-type: none"> <li>White paper setting out a framework for delivering a sustainable energy future in Ireland.</li> <li>Outlines strategic Goals for: <ul style="list-style-type: none"> <li>Security of Supply</li> <li>Sustainability of Energy</li> <li>Competitiveness of Energy Supply</li> </ul> </li> </ul>	<p>The underpinning Strategic Goals are:</p> <ul style="list-style-type: none"> <li>Ensuring that electricity supply consistently meets demand</li> <li>Ensuring the physical security and reliability of gas supplies to Ireland</li> <li>Enhancing the diversity of fuels used for power generation</li> <li>Delivering electricity and gas to homes and businesses over efficient, reliable and secure networks</li> <li>Creating a stable attractive environment for hydrocarbon exploration and production</li> <li>Being prepared for energy supply disruptions</li> </ul>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.</p>

National Adaptation Framework (NAF) 2018 and associated regional, local and sectoral adaptation plans	<ul style="list-style-type: none"> <li>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</li> </ul>	<ul style="list-style-type: none"> <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 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.
2030 Climate and Energy Framework	Adopted October 2014, includes EU-wide targets and policy objectives for the period from 2021 to 2030.	<p>Key targets for 2030:</p> <ul style="list-style-type: none"> <li>At least 40% cut in greenhouse gas emissions (from 1990 levels).</li> <li>At least 32% share for renewable energy. This was revised upwards in 2018.</li> <li>At least 32.5% improvement in energy efficiency. This was revised upwards in 2018.</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 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.
National Renewable Energy Action Plan (2010)	<ul style="list-style-type: none"> <li>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.</li> </ul>	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 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.
National Energy Efficiency Action Plan for Ireland (2009 – 2020)	<ul style="list-style-type: none"> <li>This is the second National Energy Efficiency Action Plan for Ireland.</li> </ul>	<ul style="list-style-type: none"> <li>The Plan reviews the original 90 actions outlined in the first Plan and updates/renews/removes them as appropriate.</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 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.
National Energy & Climate Plan (NECP) 2021 – 2030	Ireland's National Energy & Climate Plan (NECP) 2021-2030 takes into account energy and climate policies developed up to 2019, the levels of demographic and economic growth identified in the National Planning Framework - Project 2040 and includes all of the climate and energy measures as set out in the National Development Plan 2018-2027.	The planned policies and measures that were identified up to the end of 2019, collectively deliver a 30% reduction by 2030 in non-Emission Trading Systems greenhouse gas emissions (from 2005 levels). Ireland is committed to achieving a 7% annual average reduction in greenhouse gas emissions between 2021 and 2030. The NECP was drafted in line with the current EU effort-sharing approach, before the Government committed to this higher level of ambition, and therefore does not reflect this higher commitment. Ireland is currently developing those policies and measures and intends to integrate the revision of the NECP into the process which will be required for increasing the overall EU contribution under the Paris Agreement.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.
Wildlife Act of 1976 Wildlife (Amendment) Act, 2000	<ul style="list-style-type: none"> <li>The act provides protection and conservation of wild flora and fauna.</li> </ul>	<ul style="list-style-type: none"> <li>Provides protection for certain species, their habitats and important ecosystems</li> <li>Give statutory protection to NHAs</li> <li>Enhances wildlife species and their habitats</li> <li>Includes more species for protection</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 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.
Actions for Biodiversity (2017-2021) Ireland's National Biodiversity Plan	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <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 ecosystem 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 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.
National Broadband Plan (2012)	<ul style="list-style-type: none"> <li>Sets out the strategy to deliver high speed broadband throughout Ireland.</li> </ul>	The Plan sets out: <ul style="list-style-type: none"> <li>A clear statement of Government policy on the delivery of High-Speed Broadband.</li> <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>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.
European Communities (Water Policy) Regulations of 2003 (SI 722 of 2003)	<ul style="list-style-type: none"> <li>Transpose the Water Framework Directive into legislation.</li> <li>Outlines the general duty of public authorities in relation to water.</li> </ul>	<ul style="list-style-type: none"> <li>Requires the public to be informed and consulted on the Plan and for progress reports to be published on River Basin Districts (RBDs).</li> <li>Implements a Register of protected areas, Classification systems and Monitoring programmes for water bodies.</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 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

<p>European Communities (Water Policy) Regulations of 2003 (SI 350 of 2014)</p> <p>European Communities Environmental Objectives (Surface waters) Regulations of 2009 (SI 272 of 2009)</p>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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>	<p>etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>European Communities Environmental Objectives (Groundwater) Regulations of 2010 (SI 9 of 2010)</p>	<ul style="list-style-type: none"> <li>Transpose the requirements of the Groundwater Directive 2006/118/EC into Irish Legislation.</li> </ul>	<ul style="list-style-type: none"> <li>Outlines environmental objectives to be achieved for groundwater bodies of groundwater against pollution and deterioration in quality.</li> <li>Sets groundwater quality standards.</li> <li>Outlines threshold values for the classification and protection of groundwater.</li> </ul>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.</p>
<p>Water Pollution Acts 1977 to 1990</p>	<ul style="list-style-type: none"> <li>The Water Pollution Acts allow Local Authorities the authority regulate and supervise actions relating to water in their division.</li> </ul>	<p>The Water Pollution Acts enable local authorities to:</p> <ul style="list-style-type: none"> <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>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.</p>
<p>Water Services Act 2007</p> <p>Water Services (Amendment) Act 2012</p> <p>Water Services Act (No. 2) 2013</p>	<ul style="list-style-type: none"> <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> <li>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.</li> </ul>	<p>Key strategic objectives include:</p> <ul style="list-style-type: none"> <li>Ensuring Irish Water delivers infrastructural projects that meet key public health, environmental and economic objectives in the water services sector.</li> <li>Ensuring the provision of adequate water and sewerage services in the gateways and hubs listed in the National Spatial Strategy, and in other locations where services need to be enhanced.</li> <li>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</li> <li>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.</li> </ul>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.</p>
<p>Irish Water's Water Services Strategic Plan 2015 and associated Proposed Capital Investment Plan (2014-2016)</p>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<p>Six strategic objectives as follows:</p> <ul style="list-style-type: none"> <li>Meet Customer Expectations.</li> <li>Ensure a Safe and Reliable Water Supply.</li> <li>Provide Effective Management of Waste water.</li> <li>Protect and Enhance the Environment.</li> <li>Support Social and Economic Growth.</li> <li>Invest in the Future.</li> </ul>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.</p>
<p>Raised Bog SAC Management Plan and Review of Raised Bog Natural Heritage Areas</p>	<ul style="list-style-type: none"> <li>Aims to meet nature conservation obligations while having regard to national and local economic, social and cultural needs</li> </ul>	<ul style="list-style-type: none"> <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>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.</p>
<p>Food Harvest 2020</p>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Seeks for the improvement of all agricultural sectors at all levels in terms of sustainability, environmental consideration and marketing development.</li> </ul>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.</p>
<p>Agri-vision 2015 Action Plan</p>	<p>Outlines the vision for agricultural industry to improve competitiveness and response to market demand while respecting and enhancing the environment</p>	<p>not applicable</p>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.</p>

<p>Rural Environmental Protection Scheme (REPS)</p> <p>Agri-Environmental Options Scheme (AEOS)</p> <p>Green, Low-Carbon, Agri-environment Scheme (GLAS)</p>	<ul style="list-style-type: none"> <li>• Agri-environmental funding schemes aimed at rural development for the environmental enhancement and protection.</li> <li>• GLAS is the new replacement for REPS and AEOS which are both expiring.</li> </ul>	<ul style="list-style-type: none"> <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>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.</p>
<p>National Rural Development Programme</p>	<p>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</p>	<p>At a more detailed level, the programme also:</p> <ul style="list-style-type: none"> <li>• Supports structural change at farm level including training young farmers and encouraging early retirement, support for restructuring, development and innovation;</li> <li>• 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</li> <li>• 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</li> </ul>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.</p>
<p>Realising our Rural Potential: The Action Plan for Rural Development 2017</p>	<p>The Plan aims to unlock the potential of rural Ireland through a framework of supports at national and local level which will ensure that people who live in rural areas have increased opportunities for employment locally, and access to public services and social networks that support a high quality of life.</p>	<p>The Plan contains 276 actions across five key pillars. The five pillars are:</p> <ul style="list-style-type: none"> <li>• Supporting Sustainable Communities,</li> <li>• Supporting Enterprise and Employment,</li> <li>• Maximising our Rural Tourism and Recreation Potential,</li> <li>• Fostering Culture and Creativity in Rural Communities, and</li> <li>• Improving Rural Infrastructure and Connectivity.</li> </ul>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.</p>
<p>National Forestry Programme (2014-2020)</p>	<ul style="list-style-type: none"> <li>• Represents Ireland's proposals for 100% State aid funding for a new Forestry Programme for the period 2014 – 2020.</li> </ul>	<p>Measures include the following:</p> <ul style="list-style-type: none"> <li>• Afforestation and Creation of Woodland</li> <li>• NeighbourWood Scheme</li> <li>• Forest Roads</li> <li>• Reconstitution Scheme</li> <li>• Woodland Improvement Scheme</li> <li>• Native Woodland Conservation Scheme</li> <li>• Knowledge Transfer and Information Actions</li> <li>• Producer Groups</li> <li>• Innovative Forest Technology</li> <li>• Forest Genetic Reproductive Material</li> <li>• Forest Management Plans</li> </ul>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.</p>
<p>River Basin Management Plan</p>	<ul style="list-style-type: none"> <li>• The River Basin Management Plan sets out the measures planned to maintain and improve the status of waters.</li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Identify and manages water bodies in the RBD.</li> <li>• Establish a programme of measures for monitoring and improving water quality in the RBD.</li> <li>• Involve the public through consultations.</li> </ul>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.</p>
<p>National Peatlands Strategy (2015-2025)</p>	<p>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.</p>	<p>Objectives of the Strategy include:</p> <ul style="list-style-type: none"> <li>• To give direction to Ireland's approach to peatland management.</li> <li>• To apply to all peatlands, including peat soils.</li> <li>• 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.</li> <li>• To ensure that Ireland's peatlands are sustainably managed so that their benefits can be enjoyed responsibly.</li> <li>• To inform appropriate regulatory systems to facilitate good decision making in support of responsible use.</li> </ul>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.</p>
<p>Flood Risk Management Plans arising from National Catchment Flood Risk Assessment and Management Programme</p>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<p>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.</p>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.</p>
<p>Draft National Bioenergy Plan 2014 - 2020</p>	<p>The Draft Bioenergy Plan sets out a vision as follows:</p> <ul style="list-style-type: none"> <li>• 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.</li> </ul>	<p>Three high level goals, of equal importance, based on the concept of sustainable development are identified:</p> <ul style="list-style-type: none"> <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>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.</p>

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 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.
National Alternative Fuels Infrastructure for the Transport Sector (DTTAS) 2017- 2030	This Framework sets targets to achieve an appropriate level of alternative fuels infrastructure for transport, which is relative to national policy and Irish market needs. Non-infrastructure-based incentives to support the use of the infrastructure and the uptake of alternative fuels are also included within the scope of the Framework.	Targets for alternative fuel infrastructure include the following: <ul style="list-style-type: none"> <li>• AFV forecasts</li> <li>• Electricity targets</li> <li>• Natural gas (CNG, LNG) targets</li> <li>• Hydrogen targets</li> <li>• Biofuels targets</li> <li>• LPG targets</li> <li>• Synthetic and paraffinic fuels targets</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 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.
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: <ul style="list-style-type: none"> <li>• 85% increase in exports to €19 billion.</li> <li>• 70% increase in value added to €13 billion.</li> <li>• 60% increase in primary production to €10 billion.</li> <li>• The creation of 23,000 additional jobs all along the supply chain from producer level to high-end value-added product development.</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 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.
National Cycle Network Scoping Study 2010	<ul style="list-style-type: none"> <li>• Outlines objectives and actions aimed at developing a strong cycle network in Ireland</li> <li>• Sets out 19 specific objectives, and details the 109 actions, aimed at ensuring that a cycling culture is developed</li> </ul>	<ul style="list-style-type: none"> <li>• Sets a target where 10% of all journeys will be made by bike by 2020</li> <li>• Proposes the planning, infrastructure, communication, education and stakeholder participations measures required to implement the initiative</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 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.
National Policy Framework for Alternative Fuels Infrastructure for Transport in Ireland 2017 to 2030	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> </ul>	This policy set out to achieve five key goals in transport: <ul style="list-style-type: none"> <li>• Reduce overall travel demand</li> <li>• Maximise the efficiency of the transport network</li> <li>• Reduce reliance on fossil fuels</li> <li>• Reduce transport emissions</li> <li>• Improve accessibility to transport</li> </ul> <p>These goals remain the cornerstone of transport policy and are fully aligned to the objectives of this National Policy Framework.</p>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.
Tourism Action Plan 2019-2021	The Tourism Action Plan 2019-2021 sets out actions that the Tourism Leadership Group has identified as priorities to be progressed until 2021 in order to maintain sustainable growth in overseas tourism revenue and employment. Each action involves specific tourism stakeholders, both in the public and private sectors, all of whom we expect to proactively work towards the completion of actions within the specified timeframe.	The Plan contains 27 actions focusing on the following areas: <ul style="list-style-type: none"> <li>• Policy Context</li> <li>• Marketing Ireland as a Visitor Destination</li> <li>• Enhancing the Visitor Experience</li> <li>• Research in the Irish Tourism Sector</li> <li>• Supporting Local Communities in Tourism</li> <li>• Wider Government Policy</li> <li>• International Context</li> <li>• Co-ordination Structures</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 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.
Tourism Policy Statement: People, Place and Policy – Growing Tourism to 2025	The main goal of this policy statement is to have a vibrant, attractive tourism sector that makes a significant contribution to employment across the country; is economically, socially and environmentally sustainable; helps promote a positive image of Ireland overseas, and is a sector in which people want to work.	The Tourism Policy Statement sets three headline targets to be achieved by 2025: <ul style="list-style-type: none"> <li>• Overseas tourism revenue of €5 billion per year</li> <li>• net of inflation excluding carrier receipts;</li> <li>• 250,000 people employed in tourism; and</li> <li>• 10 million overseas visitors to Ireland per year.</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 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.
Draft Renewable Electricity Policy and Development Framework	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.  Methodology: Development of the Policy and Development Framework is to be informed by the carrying out of an SEA, including widespread consultation with stakeholders and public, and with AA under the Habitats 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 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.

National Alternative Fuels Infrastructure for the Transport Sector 2017-2030	This Framework sets targets to achieve an appropriate level of alternative fuels infrastructure for transport, which is relative to national policy and Irish market needs. Non-infrastructure-based incentives to support the use of the infrastructure and the uptake of alternative fuels are also included within the scope of the Framework.	Targets for alternative fuel infrastructure include the following: <ul style="list-style-type: none"> <li>• AFV forecasts</li> <li>• Electricity targets</li> <li>• Natural gas (CNG, LNG) targets</li> <li>• Hydrogen targets</li> <li>• Biofuels targets</li> <li>• LPG targets</li> </ul> Synthetic and paraffinic fuels targets	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.
People Place and Policy - Growing Tourism to 2025	Growing Tourism to 2025 is a policy framework for the development of tourism within the Country.	The framework establishes the overall tourism goal of Government; <ul style="list-style-type: none"> <li>• Employment in the tourism sector will be 250,000 by 2025, compared with around 200,000 at present.</li> <li>• There will be 10 million visits to Ireland annually by 2025.</li> </ul> The Government's ambition is that overseas tourism revenue will reach €5 billion in real terms by 2025.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.
Waterways Ireland Heritage Plan 2016-2020	The overarching aim of the Plan is to: <i>"Identify and protect the unique waterways heritage and promote its sustainable use for the enjoyment of this and future generations"</i> .	Four objectives of the Plan include the following: <ul style="list-style-type: none"> <li>• Objective 1: Fostering partnerships to continue building waterway heritage knowledge through storing information, undertaking research and developing best practice.</li> <li>• Objective 2: Promoting awareness, appreciation and enjoyment of our waterway heritage with a focus on community engagement.</li> <li>• Objective 3: Promoting the integrated management, conservation, protection and sustainable use of the inland navigable waterway asset.</li> <li>• Objective 4: To develop Waterways Ireland as a heritage organisation committed to achieving the aim of this plan.</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 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.
Tourism Development and Innovation – A Strategy for Investment 2016-2022	This strategy sets out the framework and mechanism for the delivery of investment to cities, towns, villages, communities and businesses across the country. It identifies priorities to support innovation in the sector to retain and grow the country's competitiveness in the marketplace. Its ultimate aim is to strengthen the appeal of Ireland for international visitors.	The objectives of the Tourism Development and Innovation Strategy are: <ul style="list-style-type: none"> <li>• To successfully and consistently deliver a world class visitor experience;</li> <li>• To support a tourism sector that is profitable and achieves sustainable levels of growth and delivers jobs;</li> <li>• To facilitate communities to play an enhanced role in developing tourism in their locality, thereby strengthening and enriching local communities; and</li> <li>• To recognise, value and enhance Ireland's natural environment as the cornerstone of Irish tourism.</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 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.
All Ireland Pollinator Plan 2015-2020 and 2021-2025 [in preparation]	The All-Ireland Pollinator Plan is an island-wide attempt to reverse declines in pollinating insects in order to ensure the sustainability of our food, avoid additional economic impacts on agriculture, and protect the health of the environment.  The main objectives include: <ul style="list-style-type: none"> <li>• Making farmland, public land and private land in Ireland pollinator friendly;</li> <li>• Raising awareness of pollinators and how to protect them;</li> <li>• Managed pollinators – supporting beekeepers and growers;</li> <li>• Expanding our knowledge of pollinators and pollination service; and</li> <li>• Collecting evidence to track change and measure success.</li> </ul>	<ul style="list-style-type: none"> <li>• This voluntary Plan identified 81 actions, shared out between over 100 governmental and non-governmental organisations.</li> <li>• A large focus of the Plan is to identify actions to improve the quality and amount of flower-rich habitat.</li> <li>• Actions range from creating pollinator highways along our transport routes, to supporting pollinators on farmland, in gardens, businesses, and on public land.</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 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.
Regional/ County/Local Level			
Southern Regional Economic and Spatial Strategy 2020-2032	The Regional Spatial and Economic Strategy provides a long-term strategic planning and economic framework for the Southern Region in order to support the implementation of the National Planning Framework.	The Southern Regional Economic and Spatial Strategy includes provisions for its nine constituent local authorities: Waterford City and County Council, Cork City Council, Cork County Council, Tipperary County Council, Wexford County Council, Kerry County Council, Clare County Council, Limerick City and County Council, Kilkenny County Council and Carlow County Council.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.
Integrated Implementation Plan 2019-2024	The priorities in the Integrated Infrastructure Plan align with the objectives and priorities set out in the Greater Dublin Transport Strategy 2016-2035, focused on improving public and sustainable transport. While the bulk of the Plan relates solely to the Greater Dublin Area, certain areas such as public transport services and activities related to small public service vehicles are dealt with on a national basis.	The Implementation Plan identifies investment proposals for a number of areas including: <ul style="list-style-type: none"> <li>• Bus</li> <li>• Light Rail;</li> <li>• Heavy Rai;</li> <li>• Integration Measures and Sustainable Transport Investment;</li> <li>• Integrated Service Plan; and</li> <li>• Integration and Accessibility.</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 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.
NPWS Conservation Plans and/or Conservation	Management planning for nature conservation sites has a number of aims. These include:	<ul style="list-style-type: none"> <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> </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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs



Objectives for SACs and SPAs	<ul style="list-style-type: none"> <li>To identify and evaluate the features of interest for a site</li> <li>To set clear objectives for the conservation of the features of interest</li> <li>To describe the site and its management</li> <li>To identify issues (both positive and negative) that might influence the site</li> <li>To set out appropriate strategies/management actions to achieve the objectives</li> </ul>	<ul style="list-style-type: none"> <li>These objectives are used when carrying out appropriate assessments for plans and projects that might impact on these sites.</li> </ul>	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.	<ul style="list-style-type: none"> <li>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.</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 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.
Land Use Plans (including Development Plans and Local Area Plans) in force within County Tipperary and in other adjoining planning authorities	<ul style="list-style-type: none"> <li>Outline planning objectives for land use development.</li> <li>Strategic framework for planning and sustainable development including those set out in National Planning Framework and Southern Regional Economic and Spatial Strategy.</li> <li>Set out the policies and proposals to guide development in the relevant area.</li> </ul>	<ul style="list-style-type: none"> <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 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.
Local Economic and Community Plans (LECPs), including the Tipperary LECP 2016-2022	<ul style="list-style-type: none"> <li>The overarching vision for each LECP is: “to promote the well-being and quality of life of citizens and communities</li> </ul>	<ul style="list-style-type: none"> <li>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.</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 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.
County Tipperary Landscape Character Assessment (2016) and Landscape Character Assessments in adjoining counties	Characterises the geographical dimension of the landscape.	<ul style="list-style-type: none"> <li>Identifies the quality, value, sensitivity and capacity of the landscape area.</li> <li>Guides strategies and guidelines for the future development of the landscape.</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 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.
Strategic Tourism Marketing, Experience and Destination Development Plan 2016-2021 and ‘Tipperary Transforming – Tourism Product Development Plan 2020 – 2030’	The overall objective has been to create a Plan to enable growth for Tipperary as a unique tourism destination within the island of Ireland experience.	<p>In meeting that objective the Plan’s aims are:</p> <ul style="list-style-type: none"> <li>To develop and promote the tourism experiences in order to improve Tipperary’s performance within the national framework;</li> <li>To encourage industry sustainability and growth through the improvement and development of product offering;</li> <li>To build the capacity of tourism providers and to extend visitor length of stay; and</li> <li>To identify and build synergies between different tourism product offerings in order to deliver a top quality visitor experience.</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 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.
Tipperary Heritage Plan 2017-2021	The aim of the Tipperary Heritage and Biodiversity Plan 2017- 2021 is to connect the citizens of Tipperary to their heritage, raise awareness and appreciation of this rich asset and ensure its protection for future generations.	<p>The actions of this plan come under 3 key objectives:</p> <ul style="list-style-type: none"> <li>Promote awareness and appreciation of the Heritage of Tipperary;</li> <li>Promote active conservation of the Heritage of Tipperary; and</li> <li>Support gathering and dissemination of information on the Heritage of Tipperary.</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 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.
Tipperary Noise Action Plan 2019-2023	Noise Action Plans are prepared in accordance with the requirements of the Environmental Noise Regulations 2006, Statutory Instrument 140 of 2006. These Regulations give effect to the EU Directive 2002/49/EC relating to the assessment and management of environmental noise. This Directive sets out a process for managing environmental noise in a consistent manner across the EU and the Noise Regulations set out the	The main purpose of Noise Action Plans is to: Inform and consult the public about noise exposure, its effects and the measures which may be considered to address noise problems Address strategic noise issues by requiring competent authorities to draw up action plans to manage noise issues and their effects Reduce noise, where possible, and maintain the environmental acoustic quality where it is good	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.

	approach to meeting the requirements of the Directive in Ireland.		
Tipperary County Council's Climate Adaptation Strategy 2019-2024	The Strategy is developed around 6 key thematic areas: <ol style="list-style-type: none"> <li>1. Local Adaptation Governance and Business Operations</li> <li>2. Infrastructure and Built Environment</li> <li>3. Land Use and Development</li> <li>4. Drainage and Flood Management</li> <li>5. Natural Resources and Cultural Infrastructure</li> <li>6. Sustaining Our Communities</li> </ol>	The Climate Adaptation Strategy takes on the role as the primary instrument at local level to: <ul style="list-style-type: none"> <li>• Ensure a proper comprehension of the key risks and vulnerabilities of climate change;</li> <li>• Bring forward the implementation of climate resilient actions in a planned and proactive manner; and</li> <li>• Ensure that climate adaptation considerations are mainstreamed into all plans and policies and integrated into all operations and functions of Tipperary County Council.</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 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.
Tipperary County Council Renewable Energy Strategy	The Strategy sets out the framework for the delivery of sustainable and renewable energies throughout the County.	The LARES outlines the potential for a range of renewable energy resources and developments and acknowledges the significant contribution that they can make to the county in terms of energy security, reduced reliance on traditional fossil fuels, enabling future energy exports, meeting assigned national targets and the transition to a low carbon economy.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.
Southern 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 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, strategies, including those relating to the 'Ireland's Ancient East', 'Ireland's Hidden Heartlands' and 'Wild Atlantic Way' brands	Fáilte Ireland's work includes preparing various plans and strategies for Ireland's Wild Atlantic Way and other brands and initiatives. These plans are subject to their own environmental assessment processes and any project arising is required to be consistent with and conform with the provisions of all adopted/approved Statutory Policies, Strategies, Plans and Programmes, including provisions for the protection and management of the environment.	Some of Fáilte Ireland's plans and strategies include various projects relating to land use and infrastructural development, including those relating to development of land or on land and the carrying out of land use activities. Many of these projects exist already while some are not currently in existence. The Statutory Policies, Strategies, Plans and Programmes that provide for different projects undergo a variety of environmental assessments. These assessments ensure that environmental effects are considered, including: those arising from new and intensified uses and activities; and those arising from various sectors such as tourism.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in 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.
Various existing, planned and emerging projects provided for by the above plans and programmes	These projects have been provided for by higher-level plans and programmes.	These projects will contribute towards the development of the area to which the Plan relates and/or wider area and will contribute towards 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 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.

## Appendix II Background information on European sites

As labelled – this information is almost always included in the appendix for our assessments – as this information is standard and often quite lengthy. It provides more details as to the threats and pressures for each European site.

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
000216	River Shannon Callows SAC	Alkaline fens [7230], Otter ( <i>Lutra lutra</i> ) [1355], Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> ( <i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i> ) [91E0], Limestone pavements [8240], <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils ( <i>Molinion caeruleae</i> ) [6410], Lowland hay meadows ( <i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i> ) [6510]	F03.01, A03.03, K03.04, G05.01, J02.04.01, A04.01, J02.05, A08, A04.03, A04.02.05, J02.01, J02.05.02, C01.03.02, B02.02, A07, A03, B06, G01, A10.01, J02.11, D01.01	Hunting, abandonment or lack of mowing, predation, trampling, overuse, flooding, intensive grazing, modification of hydrographic functioning, general, fertilisation, abandonment of pastoral systems lack of grazing, non intensive mixed animal grazing, landfill, land reclamation and drying out, general, modifying structures of inland water courses, mechanical removal of peat, forestry clearance, use of biocides, hormones and chemicals, mowing or cutting of grassland, grazing in forests or woodland, outdoor sports and leisure activities, recreational activities, removal of hedges and copses or scrub, siltation rate changes, dumping, depositing of dredged deposits, paths, tracks, cycling tracks
000412	Slieve Bloom Mountains SAC	Blanket bogs * if active bog [7130], Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> ( <i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i> ) [91E0], Northern Atlantic wet heaths with <i>Erica tetralix</i> [4010]	B02.02, J01.01, J02.15, G01.03.02, H05.01, I01, G01.02, A04.03, G05.01, K02.01, C01, B02	Forestry clearance, burning down, other human induced changes in hydraulic conditions, off-road motorized driving, garbage and solid waste, invasive non-native species, walking, horse-riding and non-motorised vehicles, abandonment of pastoral systems lack of grazing, trampling, overuse, species composition change (succession), mining and quarrying, forest and plantation management & use
000585	Sharavogue Bog SAC	Active raised bogs [7110], Degraded raised bogs still capable of natural regeneration [7120], Depressions on peat substrates of the Rhynchosporion [7150]	J02.15, B02.02, I02, J01.01, A08	Other human induced changes in hydraulic conditions, forestry clearance, problematic native species, burning down, fertilisation
000934	Kilduff, Devilsbit Mountain SAC	Species-rich <i>Nardus</i> grasslands, on siliceous substrates in mountain areas - and submountain areas in Continental Europe [6230], European dry heaths [4030]	A10, G01.02, G01.04.01, H05.01, F03.02.02, G02.09	Restructuring agricultural land holding, walking, horse-riding and non-motorised vehicles, mountaineering & rock climbing, garbage and solid waste, taking from nest (e.g. falcons), wildlife watching
002147	Lisduff Fen SAC	Alkaline fens [7230], Geyer's whorl snail ( <i>Vertigo geyeri</i> ) [1013], Petrifying springs with tufa formation ( <i>Cratoneurion</i> ) [7220]	C01, A04.03, A02.01, J02.10, A07, X, A08, E03.03, E05, E03.01	Mining and quarrying, abandonment of pastoral systems lack of grazing, agricultural intensification, management of aquatic and bank vegetation for drainage purposes, use of biocides, hormones and chemicals, no threats or pressures, fertilisation, disposal of inert materials, storage of materials, disposal of household or recreational facility waste
002162	River Barrow and River Nore SAC	Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0], Otter ( <i>Lutra lutra</i> ) [1355], Brook lamprey ( <i>Lampetra planeri</i> ) [1096], Sea lamprey ( <i>Petromyzon marinus</i> ) [1095], Estuaries [1130], White-clawed crayfish ( <i>Austropotamobius pallipes</i> ) [1092], Water courses of plain to montane levels with the <i>Ranunculion</i> fluitantis and <i>Callitriche-Batrachion</i> vegetation [3260], Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> ( <i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i> ) [91E0], Mudflats and sandflats not covered by seawater at low tide [1140], Desmoulin's whorl snail ( <i>Vertigo moulinsiana</i> ) [1016], Atlantic salt meadows ( <i>Glauco-Puccinellietalia maritimae</i> ) [1330], River lamprey ( <i>Lampetra fluviatilis</i> ) [1099], Reefs [1170], Twaite shad ( <i>Alosa fallax</i> ) [1103], <i>Salicornia</i> and other annuals colonising mud and sand [1310], Atlantic salmon ( <i>Salmo salar</i> ) [1106], Nore Pearl Mussel ( <i>Margaritifera durrovensis</i> ) [1990], Mediterranean salt meadows ( <i>Juncetalia maritimi</i> ) [1410], Freshwater pearl mussel ( <i>Margaritifera margaritifera</i> ) [1029], Petrifying springs with tufa formation ( <i>Cratoneurion</i> ) [7220], Killarney fern ( <i>Trichomanes speciosum</i> ) [1421], European dry heaths [4030], Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]	J02.12.02, F02.01.02, A04.01.01, F01.01, F02.03, E02, C01.03, F02, K01.01, C01.01.01, A02.01, A10.01, D03.01, J02.06, B02.01.01, B02, M01, J02, B05, J02.02.01, B07, H01, I01, J03.02.01, J02.05.02	Dykes and flooding defence in inland water systems, netting, intensive cattle grazing, intensive fish farming, intensification, leisure fishing, industrial or commercial areas, peat extraction, fishing and harvesting aquatic resources, erosion, sand and gravel quarries, agricultural intensification, removal of hedges and copses or scrub, port areas, water abstractions from surface waters, forest replanting (native trees), forest and plantation management & use, changes in abiotic conditions, human induced changes in hydraulic conditions, use of fertilizers (forestry), dredging or removal of limnic sediments, forestry activities not referred to above, pollution to surface waters (limnic & terrestrial, marine & brackish), invasive non-native species, reduction in migration or migration barriers, modifying structures of inland water courses
002165	Lower River Shannon SAC	Sandbanks which are slightly covered by sea water all the time [1110], Sea lamprey ( <i>Petromyzon marinus</i> ) [1095], Large shallow inlets and bays [1160], Mediterranean salt meadows ( <i>Juncetalia maritimi</i> ) [1410], <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils ( <i>Molinion caeruleae</i> ) [6410], Atlantic salmon ( <i>Salmo salar</i> ) [1106], Atlantic salt meadows ( <i>Glauco-Puccinellietalia maritimae</i> ) [1330], Bottlenose dolphin ( <i>Tursiops truncatus</i> ) [1349], <i>Salicornia</i> and other annuals colonising mud and sand [1310], River lamprey ( <i>Lampetra fluviatilis</i> ) [1099], Brook lamprey ( <i>Lampetra planeri</i> ) [1096], Coastal lagoons [1150], Vegetated sea cliffs of the Atlantic and Baltic coasts [1230], Freshwater pearl mussel ( <i>Margaritifera margaritifera</i> ) [1029], Water courses of plain to montane levels with the <i>Ranunculion</i> fluitantis and <i>Callitriche-Batrachion</i> vegetation [3260], Reefs [1170], Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus</i>	J02.01.01, G01.01, K02.03, F01, D01.01, A08, F03.01, J02.01.02, E01, I01, E03, H04, J02.10, B, C01.01.02, A04, F02.03, C01.03.01, J02.12.01	Polderisation, nautical sports, eutrophication (natural), marine and freshwater aquaculture, paths, tracks, cycling tracks, fertilisation, hunting, reclamation of land from sea, estuary or marsh, urbanised areas, human habitation, invasive non-native species, discharges, air pollution, air-borne pollutants, management of aquatic and bank vegetation for drainage purposes, silviculture, forestry, removal of beach materials, grazing, leisure fishing, hand cutting of peat, sea defence or coast protection works, tidal barrages

		excelsior ( <i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i> ) [91E0], Mudflats and sandflats not covered by seawater at low tide [1140], Perennial vegetation of stony banks [1220], Otter ( <i>Lutra lutra</i> ) [1355], Estuaries [1130]		
002236	Island Fen SAC	Alkaline fens [7230], <i>Juniperus communis</i> formations on heaths or calcareous grasslands [5130]	A04.01, J01.01, C01, K02.01, A04.03, D01, F03.01, X	Intensive grazing, burning down, mining and quarrying, species composition change (succession), abandonment of pastoral systems lack of grazing, roads, paths and railroads, hunting, no threats or pressures
002241	Lough Derg, North-East Shore SAC	Calcareous fens with <i>Cladium mariscus</i> and species of the Caricion davallianae [7210], <i>Juniperus communis</i> formations on heaths or calcareous grasslands [5130], Limestone pavements [8240], <i>Taxus baccata</i> woods of the British Isles [91J0], Alkaline fens [7230], Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> ( <i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i> ) [91E0]	A04.02.05, A10.01, D01.01, K02.01, M01.02, A08, D03.01.02, A04.01, K02.03, B02.01.01, J02.10, H01.08, G01, J02.01.03, C01, I01, I02, M01.01, J02, H01, G02.09, M01.03	Non intensive mixed animal grazing, removal of hedges and copses or scrub, paths, tracks, cycling tracks, species composition change (succession), droughts and less precipitations, fertilisation, piers or tourist harbours or recreational piers, intensive grazing, eutrophication (natural), forest replanting (native trees), management of aquatic and bank vegetation for drainage purposes, diffuse pollution to surface waters due to household sewage and waste waters, outdoor sports and leisure activities, recreational activities, infilling of ditches, dykes, ponds, pools, marshes or pits, mining and quarrying, invasive non-native species, problematic native species, temperature changes (e.g. rise of temperature & extremes), human induced changes in hydraulic conditions, pollution to surface waters (limnic & terrestrial, marine & brackish), wildlife watching, flooding and rising precipitations
002332	Coolrain Bog SAC	Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110]	J02.05, H05.01, C01.03.02, J02.15, J02.01, I01, B, J01.01	Modification of hydrographic functioning, general, garbage and solid waste, mechanical removal of peat, other human induced changes in hydraulic conditions, landfill, land reclamation and drying out, general, invasive non-native species, sylviculture, forestry, burning down
002333	Knockacoller Bog SAC	Depressions on peat substrates of the Rhynchosporion [7150], Active raised bogs [7110], Degraded raised bogs still capable of natural regeneration [7120]	A04.02.03, J01.01, C01, K02, J02.15	Non intensive horse grazing, burning down, mining and quarrying, biocenotic evolution, succession, other human induced changes in hydraulic conditions
002353	Redwood Bog SAC	Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110]	A01, C01.03, J01, X, D01.02, D01.01	Cultivation, peat extraction, fire and fire suppression, no threats or pressures, roads, motorways, paths, tracks, cycling tracks
004058	Lough Derg (Shannon) SPA	Goldeneye ( <i>Bucephala clangula</i> ) [A067], Wetland and Waterbirds [A999], Common tern ( <i>Sterna hirundo</i> ) [A193], Cormorant ( <i>Phalacrocorax carbo</i> ) [A017], Tufted Duck ( <i>Aythya fuligula</i> ) [A061]	F02.03, G01.01, A08, F03.01	Leisure fishing, nautical sports, fertilisation, hunting
004077	River Shannon and River Fergus Estuaries SPA	Curlew ( <i>Numenius arquata</i> ) [A160], Dunlin ( <i>Calidris alpina</i> ) [A149], Cormorant ( <i>Phalacrocorax carbo</i> ) [A017], Lapwing ( <i>Vanellus vanellus</i> ) [A142], Black-headed Gull ( <i>Chroicocephalus ridibundus</i> ) [A179], Grey Plover ( <i>Pluvialis squatarola</i> ) [A141], Knot ( <i>Calidris canutus</i> ) [A143], Shelduck ( <i>Tadorna tadorna</i> ) [A048], Shoveler ( <i>Anas clypeata</i> ) [A056], Black-tailed Godwit ( <i>Limosa limosa</i> ) [A156], Scaup ( <i>Aythya marila</i> ) [A062], Greenshank ( <i>Tringa nebularia</i> ) [A164], Wigeon ( <i>Anas penelope</i> ) [A050], Wetland and Waterbirds [A999], Golden Plover ( <i>Pluvialis apricaria</i> ) [A140], Light-bellied Brent Goose ( <i>Branta bernicla hrota</i> ) [A674], Pintail ( <i>Anas acuta</i> ) [A054], Redshank ( <i>Tringa totanus</i> ) [A162], Ringed Plover ( <i>Charadrius hiaticula</i> ) [A137], Bar-tailed Godwit ( <i>Limosa lapponica</i> ) [A157], Whooper Swan ( <i>Cygnus cygnus</i> ) [A038], Teal ( <i>Anas crecca</i> ) [A052]	F01, A08, D03.02, G01.01, E01, E03, E02	Marine and freshwater aquaculture, fertilisation, shipping lanes, nautical sports, urbanised areas, human habitation, discharges, industrial or commercial areas
004086	River Little Brosna Callows SPA	Pintail ( <i>Anas acuta</i> ) [A054], Whooper Swan ( <i>Cygnus cygnus</i> ) [A038], Black-tailed Godwit ( <i>Limosa limosa</i> ) [A156], Wigeon ( <i>Anas penelope</i> ) [A050], Greenland White-fronted Goose ( <i>Anser albifrons flavirostris</i> ) [A395], Lapwing ( <i>Vanellus vanellus</i> ) [A142], Black-headed Gull ( <i>Chroicocephalus ridibundus</i> ) [A179], Teal ( <i>Anas crecca</i> ) [A052], Wetland and Waterbirds [A999], Shoveler ( <i>Anas clypeata</i> ) [A056], Golden Plover ( <i>Pluvialis apricaria</i> ) [A140]	A04, A08, A03, D01.01, F03.01, F02.03, E01.03	Grazing, fertilisation, mowing or cutting of grassland, paths, tracks, cycling tracks, hunting, leisure fishing, dispersed habitation
004096	Middle Shannon Callows SPA	Golden Plover ( <i>Pluvialis apricaria</i> ) [A140], Lapwing ( <i>Vanellus vanellus</i> ) [A142], Black-tailed Godwit ( <i>Limosa limosa</i> ) [A156], Wetland and Waterbirds [A999], Wigeon ( <i>Anas penelope</i> ) [A050], Corncrake ( <i>Crex crex</i> ) [A122], Black-headed Gull ( <i>Chroicocephalus ridibundus</i> ) [A179], Whooper Swan ( <i>Cygnus cygnus</i> ) [A038]	E01, F03.01, A04, F02.03, D01.05, D01.01, G01.02, G01.01, A08, A03, A04.03	Urbanised areas, human habitation, hunting, grazing, leisure fishing, bridge, viaduct, paths, tracks, cycling tracks, walking, horse-riding and non-motorised vehicles, nautical sports, fertilisation, mowing or cutting of grassland, abandonment of pastoral systems lack of grazing
004137	Dovegrove Callows SPA	Greenland White-fronted Goose ( <i>Anser albifrons flavirostris</i> ) [A395]	A08	Fertilisation
004160	Slieve Bloom Mountains SPA	Hen harrier ( <i>Circus cyaneus</i> ) [A082]	E01.03, A04, B, D01.02, C01.03, D01.01	Dispersed habitation, grazing, sylviculture, forestry, roads, motorways, peat extraction, paths, tracks, cycling tracks
004233	River Nore SPA	Kingfisher ( <i>Alcedo atthis</i> ) [A229]	D03.01, X, J02.01	Port areas, no threats or pressures, landfill, land reclamation and drying out, general

# Non-Technical Summary

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# Section 1 Introduction and Terms of Reference

This is the Non-Technical Summary of the Environmental Report for the Draft Roscrea Local Area Plan 2023 - 2029 ("the Draft Plan"). The purpose of the Environmental Report is to provide a clear understanding of the likely environmental consequences of decisions regarding the adoption and implementation of the Plan. The Environmental Report has been prepared as part of a Strategic Environmental Assessment (SEA) process for the Plan.

## What is SEA?

SEA is a systematic process of predicting and evaluating the likely environmental effects of implementing a proposed plan, or other strategic action, in order to ensure that these effects are appropriately addressed at the earliest appropriate stage of decision-making on a par with economic, social and other considerations.

## Why is SEA needed? The Benefits

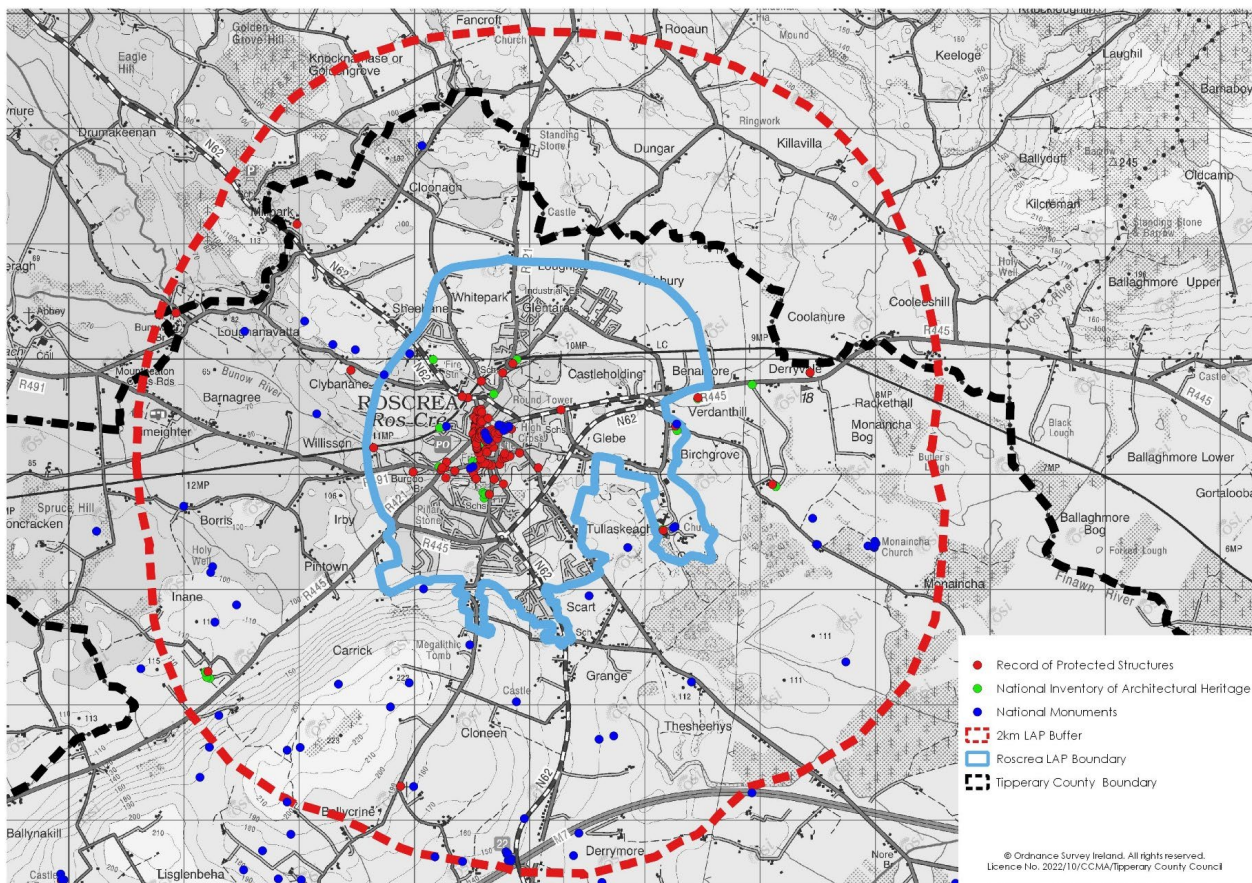
The SEA has been carried out in order to comply with the provisions of the European SEA Directive and in order to enable sustainable development and environmental protection and management. SEA is the planning authority's and the public's guide to the best areas for development in the Town.

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 areas in the most sensitive, least well-serviced and least well-connected areas. Compact development can be accompanied by placemaking initiatives to enable the Town to become a more desirable place to live – so that it maintains and improve services to existing and future communities.

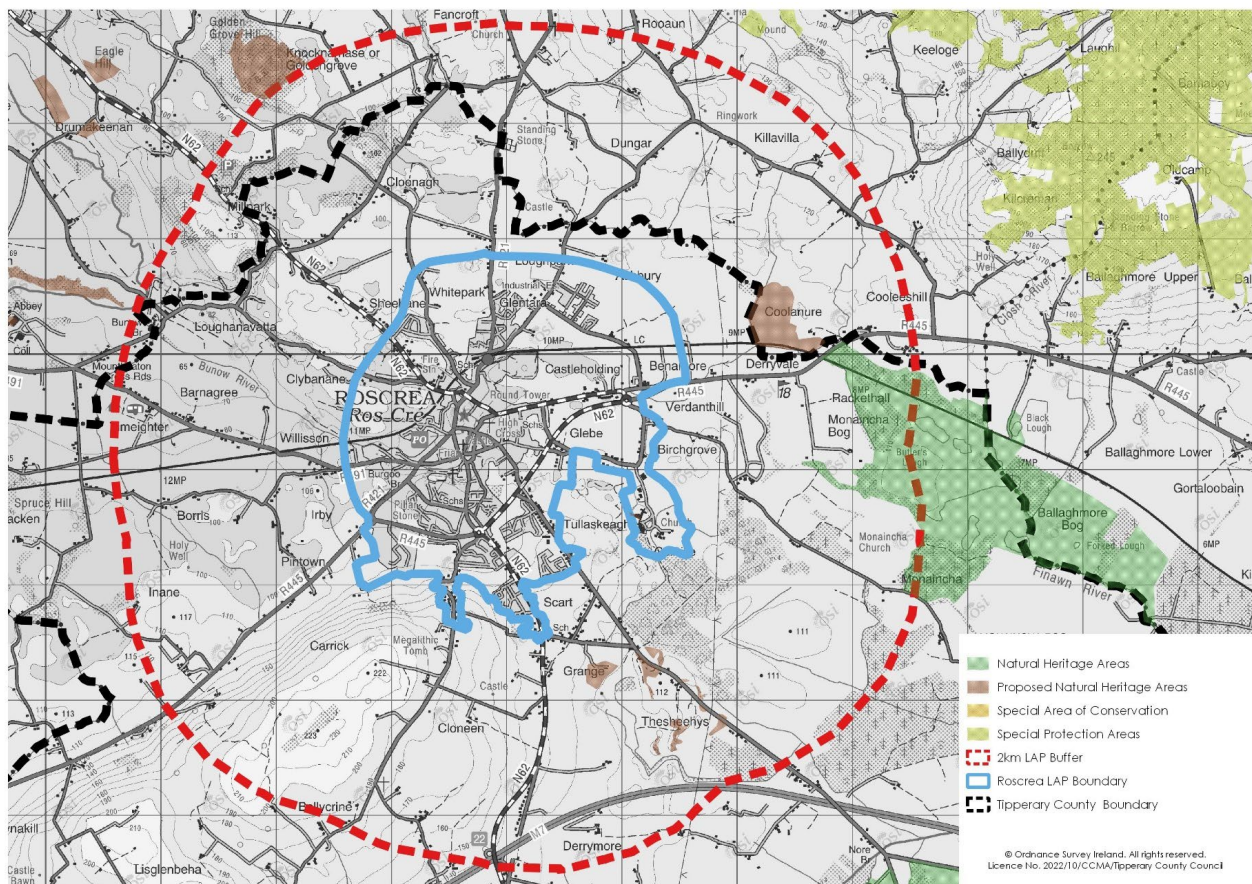
SEA enables requirements relating to environmental protection and management to be integrated into the Plan so that compatible sustainable development in the Towns' sensitive areas is also facilitated. SEA provides greater to the public and to developers. Plans are more likely to be adopted without delays or challenges and planning applications are more likely to be granted permission. Environmental mitigation is more likely to cost less.

An overlay of the key environmental sensitivities are illustrated. These key sensitivities are listed:

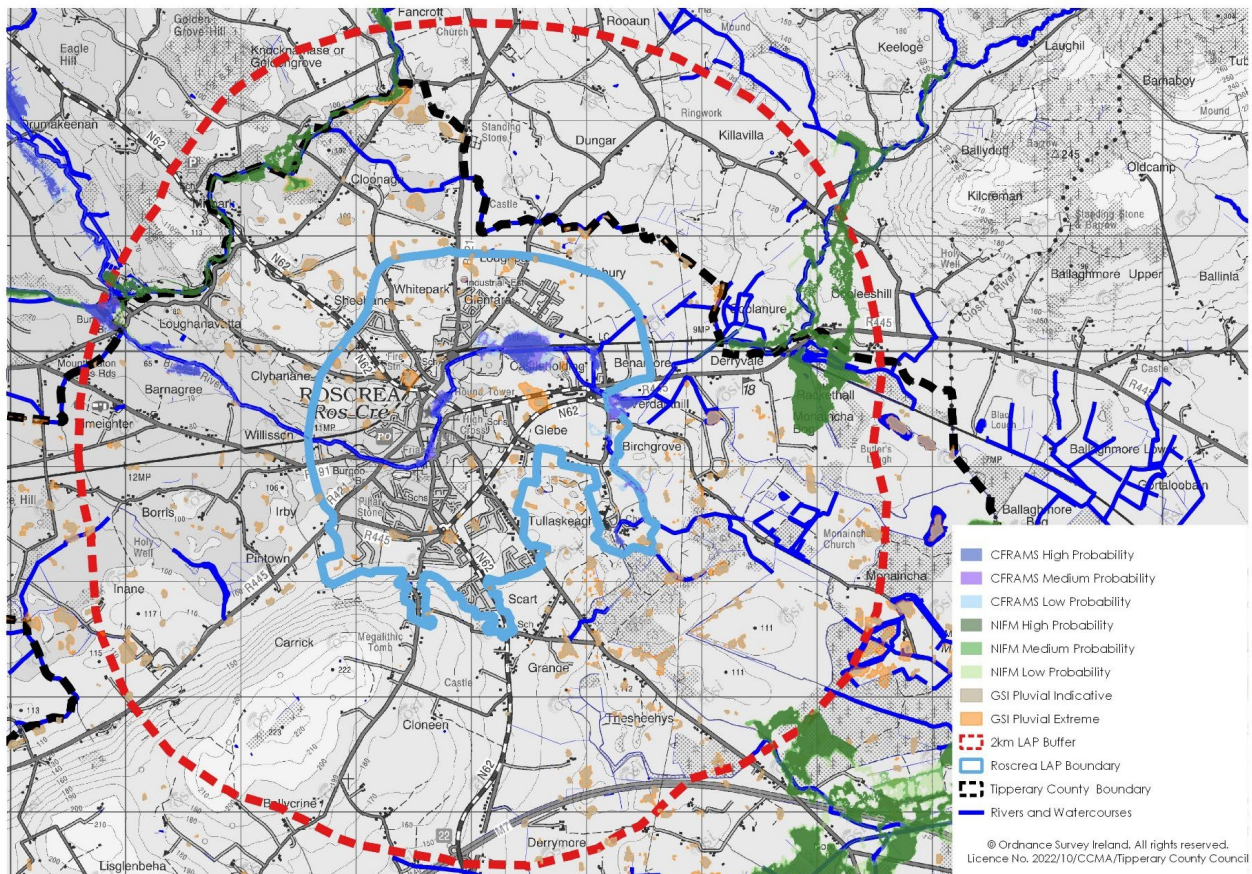
- St. Anne's, (Sean Ross Abbey), proposed Natural Heritage Area located in the Plan area
- Sheehills Esker proposed Natural Heritage Area located c. 0.5km south west of the Plan area
- Roscrea Bog proposed Natural Heritage Area located c. 0.7 km to the north-west of the Plan area;
- Mount St. Joseph Woods proposed Natural Heritage Area located c. 2.1km west of the Plan area
- Golden Grove Woods proposed Natural Heritage Area located c. 2.3km north west of the Plan area
- The ecological sensitivities associated with the Bunnow river (020) that flows through the town in a westerly direction. The WFD surface water status (2013-2018), for the River Bunnow is 'moderate'. The latest Q value for the River Bunnow is 3 - 4 (2021), Q Value status of moderate retained.
- Areas of high and moderate flood risk along the River Bunnow and areas of pluvial;
- Areas of high and extreme groundwater vulnerability throughout the town;
- Zones of archaeological importance in the centre of the town;
- Architectural Conservation Area designations in the centre of the town;
- Protected views and streetscapes in the town.



**Figure 1 Built and Cultural Heritage**



**Figure 2: Designated Sites**



**Figure 3: Water Sensitivity and Flooding**

### How does the SEA work?

All of the main environmental issues in the area were assembled and considered by the team who prepared the Plan. This helped them to devise a Plan that contributes towards the protection and management of environmental sensitivities. It also helped to identify wherever potential conflicts between the Plan and the environment exist and enabled these conflicts to be mitigated.

The SEA was scoped in consultation with designated environmental authorities.

### What is included in the Environmental Report that accompanies the Plan?

- A description of the environment and the key environmental issues;
- A description and assessment of alternatives for the Plan;
- An assessment of the provisions of the Plan; and,
- Mitigation measures, which will avoid/reduce the environmental effects of implementing the Plan and will contribute towards compliance with important environmental protection legislation.

### Difficulties Encountered during the SEA process

No significant difficulties have been encountered during the undertaking of the assessment to date. There is a need for investment in the Roscrea WWTP in line with Irish Water's Drainage Area Plan, however objectives requiring the provision of appropriate levels of water services alongside new development have been integrated into the Draft Plan.

### What happens at the end of the process?

A SEA Statement is prepared which summarises, inter alia, how environmental considerations have been integrated into the Plan.



## Section 2 The Draft Plan

### 2.1 Introduction and Content

The Plan is a local land use plan and for the proper planning and sustainable development of the 'District' town of Roscrea over the six-year period 2023-2029. The Plan sets out the Council's proposed policies and objectives for the local development of the town over the Plan period as supported by, and to be read in conjunction with the strategic planning framework as set out in the Tipperary County Development Plan 2022 - 2028. The Plan comprises a Written Statement with maps and appendices.

The written statement is set out in 9 chapters as follows:

1. Introduction
2. Planning and Development Strategy
3. Town Centre Strategy
4. Economic Development Strategy
5. Sustainable Communities
6. Transport and Connectivity
7. Recognising our Local Heritage
8. Infrastructure, Energy and Utilities
9. Landuse Zoning Framework

The appendices are set out as follows:

1. Serviced Land Assessment
2. Sustainable Travel Plan
3. Regeneration Sites
4. Town Centre First Plan (to be attached when available)
5. Appropriate Assessment Screening Report and Determination
6. Strategic Environmental Assessment Report
7. Strategic Flood Risk Assessment

Maps are set out as follows:

- Map 1: Land use Zoning Objectives  
 Map 2: (a and b) Built and Natural Heritage

### 2.2 Overarching Vision and Strategic Objectives

This Plan has been prepared to underpin the Core Strategy of the Tipperary County Development Plan 2022 - 2028 and its Core Ambition to deliver 'Vibrant, Living Towns driving the Regional and Local Economy'. 10 Strategic Objectives each comply with the United Nations Sustainable Development Goals (UNSDGs), and are reflected in the Roscrea local spatial planning framework outlined.

The vision of the Plan presented underpins the 'Vision Statement' for Tipperary as set out in the Corporate Plan 2020 – 2024: Tipperary - A vibrant place where people can live, visit and work in a competitive and resilient economy, a sustainable environment and an inclusive and active community".

Roscrea is a medium sized town of 5,446 persons located in the northeast of the county. The plan boundary for Roscrea is outlined in the Core Strategy of the Tipperary County Development Plan 2022 – 2028 and remains unchanged in the Plan.

## **2.3 Preparation of the Draft Plan**

The preparation of the Chief Executive's Draft Plan, for the consideration of Members in advance of public display was informed by the SEA, AA and SFRA processes. The Elected Members were provided with support and guidance as part of their consideration of the Draft Plan, and have agreed to the publication of the proposed Draft LAP in line with Section 20 of the Planning and Development Act 2000 (as amended).

## **2.4 Relationship with other relevant Plans and Programmes**

The Draft Plan sits within a hierarchy of statutory documents setting out public policy. The Plan must comply with relevant higher-level strategic actions and will, in turn, guide lower-level strategic actions. These documents include plans and programmes such as those detailed in Appendix of the main SEA ER. These documents have been subject to their own environmental assessment processes, as relevant.

As required by the Planning and Development Act 2000, as amended, the Draft Plan is consistent with and conforms with national and regional policies, plans and programmes, including the NPF and the RSES for the Southern Region and the Tipperary County Development Plan 2022 – 2028.

In order to be realised, projects included in the Draft 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 decision-making and consent-granting framework.

## Section 3 The Environmental Baseline

### 3.1 Introduction

The summary of the environmental baseline of the Town is described in this section. This baseline together with the Strategic Environmental Objectives, which are identified in Section 3.11, is used in order to identify, describe and evaluate the likely significant environmental effects of implementing the Draft Plan and in order to determine appropriate monitoring measures.

### 3.2 Likely Evolution of the Environment in the Absence of the Draft Plan

In the absence of a new Plan, there would be no framework for planning applications and no regulation of development across the Town. The current Plan has contributed towards environmental protection within Roscrea. If the current Roscrea and Environs Local Area Plan 2012 were to expire and not be replaced by a new Plan, this would result in a deterioration of the Town's planning and environmental protection framework. As a result, there would be an increased likelihood in the extent, magnitude and frequency of adverse effects on all environmental components 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
  - Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species such as birds and bats.
- 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 agriculture and soil, water, biodiversity and human health – including phosphorous and nitrogen deposition as a result of agricultural activities 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.

### 3.3 Biodiversity and Flora and Fauna

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

A network of green spaces, including gardens, parks, graveyards, amenity walks, railway lines and patches of woodland and scrub, provide habitats and ecological connectivity within the Town and beyond. Ecological sites within and surrounding the Plan area include those relating to:

- The Slieve Bloom Mountains Special Protection Area 004160 located c. 3km northwest of the Plan area
- St. Anne's, (Sean Ross Abbey), proposed Natural Heritage Area located in the Plan area
- Sheehills Esker proposed Natural Heritage Area located c. 0.5km south west of the Plan area
- Roscrea Bog proposed Natural Heritage Area located c. 0.7 km to the north-west of the Plan area;
- Mount St. Joseph Woods proposed Natural Heritage Area located c. 2.1km west of the Plan area
- Golden Grove Woods proposed Natural Heritage Area located c. 2.3km north west of the Plan area
- Drumakeenan, Eagle Hill and Perry's Mill proposed Natural Heritage Area located c. 3km north west of the Plan area
- The ecological sensitives associated with the Bunnow river (020) that flows through in a westerly direction.

### 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 include: Agriculture; Forestry; Extraction of resources (minerals, peat, non-renewable energy resources); Energy production processes and related infrastructure development; Development and operation of transport systems; Development, construction and use of residential, commercial, industrial and recreational infrastructure and areas; Extraction and cultivation of biological living resources (other than agriculture and forestry); and Climate change.

Ireland's Article 12 Birds Directive Reports and the 6th National Report under the Convention of Biological Diversity identify similar issues.

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.

## 3.4 Population and Human Health

Census 2016 recorded a population of 5,446 persons in Roscrea. The Core Strategy in the Tipperary County Development Plan 2022-2028 provides a population increase of 726 persons for Roscrea over the Plan period<sup>1</sup>.

Roscrea is identified as a "District Town" in the Tipperary County Development Plan 2022-2028, supporting the regional driver role of Nenagh, 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 new population provided for in the Draft Plan will interact with various environmental components. Potential interactions include:

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

Human health has the potential to be impacted upon by 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 arising from incompatible adjacent land uses for example. 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.

<sup>1</sup> Tipperary County Council (2022): *Tipperary County Development Plan 2022 - 2028*

**Existing Problems**

There is historic and predictive evidence of flooding in various locations across the Town, these have been subject to SFRA (Appendix 7 of Draft Plan).

**3.4 Soil**

Aside from "man made" ground and bog, the area is made up of mineral soils. Main soil types<sup>2</sup> surrounding built up areas of Roscrea are Luvisol soils in the Plan area and Groundwater Gley to the southeast<sup>3</sup>. Subsoils in the Plan area consist mainly of limestone sands and gravels and limestone till.

The closest geological site to Roscrea is TY053 'Nore Valley Bogs', this is located far to the south on the far side of the M7 motorway.

There is no source protection area within or proximate to the Plan area.

**3.5 Water**

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.

The Town falls into the catchment of the River Shannon, though the border of the Nore catchment is not far outside the LAP boundary to the south. The Shannon/Nore catchment boundary is identical to the River Basin District boundary. It splits the South Eastern RBD from the Shannon RBD in which Roscrea lies. The Bunnow River and its associated tributaries support biodiversity.

The WFD status (2013-2018) of groundwater underlying the Plan area is identified as being of *good* status.

The River Bunnow is classified as 'moderate'. The latest Q value for the River Bunnow is 3-- 4 (2021), with the Q Value status of moderate retained. (there are a number of minor tributaries/drains both within and connected to the plan area)

**Existing Problems**

In line with the WDF the improvement of the Q value of the River Bunnow to at least good status is a key objective to be managed as part of plan implementation, having particular reference to management of pressures, including urban run-off and urban waste water pressures.

The Draft 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 at various locations across the town.

**3.6 Air and Climatic Factors**

The Climate Action and Low Carbon Development (Amendment) Act 2021 will support Ireland's transition to Net Zero and achieve a climate neutral economy by no later than 2050.

The National Climate Action Plan 2023 (the second annual update to Ireland's Climate Action 2019) 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 net-zero emissions by no later than 2050, as committed to in the Programme for Government and set out in the Climate Act 2021.

<sup>2</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 (<http://gis.teagasc.ie/soils/soilguide.php>).

<sup>3</sup> Generally fertile soils, widely used for agriculture and associated with significant accumulation of clay.

Climate mitigation describes 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 Climate Change Advisory Council's Annual Review 2020 identifies that the most recent projections demonstrate that, under different assumptions, Ireland will not meet its emissions reduction targets, even with the additional policies and measures included in the National Development Plan. The projections also show that progress on reducing emissions is sensitive to the future path of fuel prices. A significant and sustained rate of emissions reduction of approximately - 2.5% per year is required to meet our objectives for 2050. It is noted that additional measures within the recent Climate Action Plan are not included.

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 Tipperary County Council Climate Change Adaptation Strategy 2019-2024 seeks to:

- Ensure a proper understanding of the key risks and vulnerabilities of climate change;
- Advance the implementation of climate resilient actions in a planned and proactive manner;
- Ensure that climate adaptation considerations are mainstreamed into all plans and policies; and
- integrated into all operations and functions of the local authority.

The EPA's (2020) Air Quality in Ireland 2019 identifies that:

- Air quality in Ireland is generally good however there are localised issues;
- Nitrogen dioxide (NO<sub>2</sub>) from transport emissions is polluting urban areas; and
- Ireland was above World Health Organization air quality guideline value levels at 33 monitoring sites – mostly due to the burning of solid fuel within settlements across the country.

With regard to solutions, the report identifies that:

- To tackle the problem of particulate matter, clean ways of heating homes and improve energy efficiency of homes can be progressed; and
- To reduce the impact of nitrogen dioxide, transport options in the Government's Climate Action Plan can be implemented and transport choices can be considered by individuals.

In order to comply 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. The current<sup>4</sup> air quality within the town is identified by the EPA as being *good*.

## 3.7 Material Assets

Other material assets, in addition to those referred to below, covered by the SEA include archaeological and architectural heritage natural resources of economic value, such as water and air.

### Public Assets and Infrastructure

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

### Waste Water

Irish Water is responsible for the collection, treatment and disposal of public wastewater and have carried out a Drainage Area Plan (DAP) for the town incorporating a Wastewater Infrastructure Plan for future investment. The Roscrea Wastewater Treatment Plant, has a high design capacity, with a current (2020) load of 6,773 (PE)<sup>5</sup>. Irish Water have indicated that there is capacity to cater for projected population growth in Roscrea, however, ongoing improvement works are required the town to ensure adequate separation of foul and surface water and to service of lands identified for development over the lifetime of this LAP in line with their DAP. Local network upgrades may be required some areas to provide capacity to

<sup>4</sup> 26/05/2021 (<http://www.epa.ie/air/quality/>)

<sup>5</sup> Irish Water for Tipperary 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.

individual sites. These will be customer driven/funded in accordance with the requirements of the Irish Water Connections Charging Policy.

### **Water Supply**

The town is supplied from the Roscrea Regional Water Supply Scheme in the Eastern and Midlands Region. The Roscrea Regional Water Supply Scheme produces approximately 2,269 m<sup>3</sup>/day of water serving a population of 6,112, supplied by Niamh's Well, Shinrone, Roscrea and Glenbeha water treatment plants<sup>6</sup>. Irish Water have indicated that there is capacity to cater for projected population growth from the Roscrea Water Resource zone. Monitoring is carried out by the EPA and the water supply currently meets all relevant water quality standards.

Irish Water and Tipperary County Council regulates and administers subsidies for Group Water Schemes.<sup>7</sup> Roscrea is the Water Resource Zone (WRZ)<sup>8</sup> ID 2900SC0002 serving the Plan area with capacity available as indicated by Irish Water.<sup>9</sup> A Groundwater Protection Scheme has been carried out for the County. There are some Source Protection Areas to the west and south west of the Plan area but none within or near to its boundary

### **Waste Management**

The closest municipal landfill site is Ballaghveny, Tipperary and there is a municipal Recycling Centre/Civic Amenity Site located in the town at the Dublin Road. There are approximately 135 Bring Banks in Tipperary with 4 of these located in Roscrea at the Garda Station, Civic Amenity site, Kennedy Park and St Anne's school. Tipperary has 80 clothes/textile receptacles at bring bank locations which are owned and managed by the local authority, two of these are located in Roscrea.

Waste management across the County is guided by the Southern Waste Management Plan 2015-2021.

### **Transport**

Roscrea is a well-connected town in terms of physical access to local, regional and national road networks, and to national rail services. However, the over reliance in the private car for both short local journeys, and longer journeys in the region is apparent. A Traffic and Transportation Plan<sup>10</sup> produced in 2017 by the Council, and the Sustainable Travel Plan set out Appendix 2 of the Draft Plan, will inform site briefs, new development and investment in infrastructure.

### **Land**

The Plan seeks to assist with the reuse and regeneration of brownfield sites (see Appendix 3 Regeneration Sites) and seeks a Town Centre First approach, 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.

### **Existing Problems**

There are a number of challenges with respect to the provision of water services infrastructure, some of which are summarised above. The provisions of the new Plan will contribute towards protection of the environment with regard to impacts arising from material assets.

## **3.8 Cultural Heritage**

### **Archaeological Heritage**

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.

There are various entries to the RMP within and around Roscrea (Sheet No. 12 Archaeology RMP Tipperary NR), including:

<sup>6</sup> Regional Water Resources Plan: Eastern and Midlands (Irish Water December 2022)

<sup>7</sup> Tipperary CDP 2022-2028

<sup>8</sup> Irish Water for Tipperary County Council (March 2022), 10-Year Water Supply Capacity Register: A WRZ is an independent water supply system serving a region, city, town or village and is governed by topography or the extent of the water distribution network in an area. A WRZ may include multiple Water Treatment Plants and/ or sources.

<sup>9</sup> Irish Water for Tipperary County Council (March 2022), 10-Year Water Supply Capacity Register:

<sup>10</sup> RoadPlan Consulting for Tipperary County Council

- 10–(Town - the concentration of monuments in the Central Area including Townparks, Castleholding, Demesne, Parkmore, Glebe)),
- 13 (Watermill Possible Site – a cluster to the northwest of town at Clybanane),
- 12 (Architectural fragment at Birchgrove (Corbally)), and,
- 14 (Abbey – Sean Ross Corville).

There are numerous sites and monuments found within the town’s various Zones of Archaeological Potential.<sup>11</sup>

### **Architectural Heritage**

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.

The Record of Protected Structures included in the Tipperary County Development Plan– 2022 - 2028 is legislated for under Section 12 and Section 51 of the Planning and Development Act 2000 (as amended). Protected Structures are defined 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.

There are a number of Protected Structures within and surrounding the Plan area, many of these Protected Structures are located within central parts of Roscrea town, notably Roscrea Castle and Damer house and other important ecclesiastical sites in the central area.

An Architectural Conservation Area (ACA) is a place, area, group of structures or townscape, which is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or contributes to the appreciation of a Protected Structure. An ACA may or may not include Protected Structures. In an ACA, protection is placed on the external appearance of such areas or structures. There are four designated ACAs in the Plan area, namely:

- Main Street ACA,
- Rosemary Street & Square ACA,
- Burgoo ACA (Limerick Street), and,
- Bunkers Hill ACA.

### **Existing Problems**

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

## **3.9 Landscape and Views**

Sean Ross Abbey located to the south east of the town in a rural area south of the N62, and is a former mother and baby home and religious complex. The entire area is defined by scenic farmland within which the former convent and abbey and various institutional buildings and cemeteries are located. The abbey itself is an entry to the RMP (Sheet No. 12 Archaeology RMP Tipperary NR),<sup>14</sup> (Abbey – Sean Ross Corville). The site has a social and cultural importance to the town as a result of its history.

There are 16 views listed in the Draft Plan in view of their importance to the character of the town

### **Existing Environmental Problems**

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

## **3.10 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

<sup>11</sup> Roscrea Town LAP 2013



State level e.g. the environmental protection objectives of various European Directives that have been transposed into Irish law and that 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 Draft 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.

**Table 3.1 Strategic Environmental Objectives**

Environmental Component	Guiding Principle	Strategic Environmental Objectives (as set out in the Tipperary County Development Plan 2022 – 2028 as the strategic policy under which this LAP must comply)
<b>Biodiversity, Flora and Fauna</b>	No net contribution to biodiversity losses or deterioration	<ul style="list-style-type: none"> <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 Action Plan and its targets</li> <li>• To protect, maintain and conserve natural capital</li> </ul>
<b>Population and Human Health</b>	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 style="list-style-type: none"> <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>
<b>Soil (and Land)</b>	Ensure the long-term sustainable management of land	<ul style="list-style-type: none"> <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>
<b>Water</b>	Protection, improvement and sustainable management of the water resource	<ul style="list-style-type: none"> <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 County growth targets in the context of existing and projected water supply and wastewater 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 nature-based SuDS, porous surfacing and green roofs) into development proposals</li> </ul>
<b>Material Assets</b>	Sustainable and efficient use of natural resources	<ul style="list-style-type: none"> <li>• Optimise existing infrastructure and provide new infrastructure to match population distribution proposals - this includes transport infrastructure in the town</li> <li>• Ensure access to affordable, reliable, sustainable and modern energy for all which encourages a broad energy generation mix appropriate to the town 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 active travel, public transport and 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.</li> <li>• Reduce the average energy consumption per capita including promoting energy efficient buildings, retrofitting, smart- buildings, towns and grids</li> </ul>
<b>Air</b>	Support clean air policies that reduce the impact of air pollution on the environment and public health	<ul style="list-style-type: none"> <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>

Environmental Component	Guiding Principle	Strategic Environmental Objectives (as set out in the Tipperary County Development Plan 2022 – 2028 as the strategic policy under which this LAP must comply)
<b>Climatic Factors</b> <sup>12</sup>	Achieving transition to a competitive, low carbon, climate-resilient economy that is cognisant of environmental impacts	<ul style="list-style-type: none"> <li>• To minimise emissions of greenhouse gasses</li> <li>• Integrate sustainable design solutions into the town's 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>
<b>Cultural Heritage</b>	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
<b>Landscape</b>	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

<sup>12</sup> Please also refer to relevant legislation and requirements under Section 4.10, Section 8.6, Section 9 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.

## Section 4 Alternatives

### 4.1 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. Available reasonable alternatives for the Draft Plan are provided under Types 1 to 3 detailed below.

### 4.2 Limitations in Available Alternatives

The Draft Plan is required to be prepared by 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 Draft Plan are limited by the provisions of higher-level planning objectives, including those of the National Planning Framework (NPF) and the Regional Spatial and Economic Strategy (RSES) for the Southern Region and the Tipperary County Development Plan 2022 - 2028. These documents set out various requirements for the content of the Plan including on topics such as settlement typology, land use zoning and the sustainable development of rural areas.

### 4.3 Alternatives for an Environmental Approach to the Plan

Although many environmental (including infrastructure, natural capital<sup>13</sup> and ecosystem<sup>14</sup> service and climate action issues) have been considered over previous Plan periods, the importance of these in fulfilling environmental obligations has increasingly emerged as a key focus of the NPF, the RSES and new and emerging planning legislation.

Three pillars in terms of the overall environmental approach to the Plan are set out:

1. **A Town Centre First Approach** This growth model focuses development on the town centre, promoting the re-use of existing properties and the targeted re-development of infill and strategic brownfield site for residential, commercial, and community uses. This alternative growth model directly aligns with the National Planning Framework and the Southern Region and Spatial and Economic Strategy in terms of supporting compact growth development, sustainable land management and regeneration of town centres. Alternatives in relation to the intensity of proposed town centre development in terms of population growth are examined.
2. **An Infrastructural capacity led approach** would primarily use strategic Infrastructural Assessment/Capacity Analysis and Serviced Land Assessment to land use zoning (or not) to provide an evidence base to inform future development to be provided for by the Plan.
3. **Growth Pattern Alternatives** Consideration to alternatives for how the town can grow in the most sustainable spatial pattern, having consideration to current and future patterns of development and proposed and available infrastructure.

Having consideration to the above, three alternative approaches to the overall approach of the Plan have been considered:

#### 1. Town Centre First approach alternatives

**Type 1: Alternative B** Under Alternative B, the Plan enshrines a move to a low-carbon and climate resilient economy and society by incorporating the Town Centre First approach and also enabling growth in 'Neighbourhoods' in line with sequential development and sustainable transport linkages and within a framework of active travel, efficient use of infrastructure and service provision. This alternative will

<sup>13</sup> Renewable and non-renewable resources (e.g. plants, animals, air, water, soils, minerals)

<sup>14</sup> Ecosystems are multifunctional communities of living organisms interacting with each other and their environment. Ecosystems provide a series of services for human well-being (ecosystem services) either directly or indirectly contributing towards human wellbeing

strengthen the town centre (targeting **30% population growth** in the central area) and reducing pressure for expansion into greenfield out of town sites, whilst at the same time ensuring that the planned growth can be delivered. This would mean that there would be:

- An increased likelihood in the extent, magnitude and frequency of positive effects occurring with regard to natural capital<sup>15</sup> and ecosystem service issues, such as the management of air quality, noise pollution, light pollution, pollination, flood risk, water bodies and river basins and natural resources supporting energy production and recreation; and
- A decreased likelihood in the extent, magnitude and frequency of adverse effects on natural capital and ecosystem services.
- Active support for the provisions of the National Climate Action Plan 2019 and the forthcoming Climate Action and Low-Carbon Development (amendment) Bill 2021 and the national targets for GHG emissions as set out.

Furthermore, it is essential that development under the Plan is adequately served by infrastructure and supports the move to a low-carbon and climate resilient economy and society.

**Type 1: Alternative A** This approach would very strongly embody the Government's principle of Town Centre First and compact development. The plan would designate the town centre as the primary growth area with **at least 50% of new residential development to occur in the central area** in the areas zoned for town centre, thereby strongly enabling active travel. Key regeneration sites would be identified and extension of the town into green field areas as well as consolidation of existing neighbourhoods would not be permitted.

However, the requirement for 50% of total new housing development to occur in existing town centre sites, could result in the town not meeting its housing and accommodation targets in line with population projections. Opportunities to consolidate existing peripheral neighbourhoods and to provide better active travel linkages might not be availed of, and potential for services growth and employment growth on sites outside of the town centre area might be lost. In particular, this alternative could risk the further detachment of residential neighbourhoods to the south of the town beyond the N62 and the detachment of the rail station from the central area.

## **2: Serviced Land & Infrastructure Assessment Alternatives**

**Type 2: Alternative A** would ensure that sustainable development occurs, with new development accompanied by adequate and appropriate infrastructure, in a manner which is compatible with climate action objectives. This alternative would benefit the efficient provision of infrastructure and the environment (including water, human health, ecology and air/climate) the most and would provide the highest levels of certainty and coherence to both decision makers and stakeholders, including residents and potential developers. Applications for developments would be more likely to be successful, and residual adverse effects would be least likely. This approach would also contribute towards compliance with the objectives of the RSES and NPF.

This demonstrates the greatest ability to improve the status of SEOs and is the alternative chosen in terms of appropriate approach to Serviced Land and Infrastructure assessment alternatives for Roscrea as a District Town.

**Type 2 Alternative B: A Plan prepared not using a Serviced Land and Infrastructure Assessment approach** This alternative involves preparing the Plan while not using the Serviced Land and Infrastructure Assessment approach, thereby weakening the level of background information of available infrastructure and services for lands in the Plan area and leading to a haphazard approach to land use zoning largely based on zoning already in place in the current LAP. This approach would result in land zoning far in excess of that required to accommodate new population growth and would result in a situation where targeted growth in central areas could not be achieved. This alternative would not be likely to improve the status of SEOs and would result in a significant likelihood of a deterioration in SEOs.

<sup>15</sup> Renewable and non-renewable resources (e.g. plants, animals, air, water, soils, minerals)

### 3. **Growth Pattern Alternatives**

#### **Alternative B: Town centre consolidation and linking of residential neighbourhood south of N62**

This model of growth would promote the development of the town centre, and consolidate existing neighbourhoods of residential development to the south of the town beyond the N62 in line with patterns of development that have occurred in recent years. The enhanced connectivity of these areas by investment in an active travel and public transport network would be critical. This pattern of development would limit further expansion southwards on greenfield sites, in favour of consolidation on the central area and adjoining neighbourhoods.

#### **Alternative A: Town to be defined by outer ring road extent to the North**

The current LAP seeks to define the northern boundary of the town with a proposal for a new outer ring road to divert traffic on the N62. If delivered this would offer an alternative route for traffic travelling in a south to north direction along the N62, however, it would also facilitate green field and dispersed development away from the town centre. This approach would also conflict with the National Climate Action Plan 2023 which seeks to use existing transport infrastructure rather than delivering additional infrastructure unless identified in strategic higher level plans.

#### **Selected Type 3 Alternative for the Plan: Alternative B**

Alternative B was chosen as it is in line with the objectives of the Climate Action Plan 2023 and could enable the compact and sustainable growth of the town and make best use of existing transport infrastructure.

## **Section 5 Summary of Effects arising from Plan**

The preparation of the Draft Plan for the consideration of Members in advance of public display was informed by the SEA, AA and SFRA processes.

Tipperary County Council have integrated various recommendations arising from the SEA, AA and SFRA processes into the Draft Plan (including those summarised at Section 6).

Table 5.1 summarises the overall environmental effects arising from the Draft Plan provisions. 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, considering mitigation through both provisions integrated into the Plan – see summary at Section 6. Considering, *inter alia*, the detailed mitigation which has been integrated into the Plan, it was determined that significant residual adverse environmental effects will not occur.

The Elected Members were provided with support and guidance as part of their consideration of the Draft Plan in advance of noting the publication of the Draft Plan.

**Table 5.1 Overall Evaluation – Effects arising from the Draft Plan**

<b>Environmental Component</b>	<b>Environmental Effects, in combination with the wider planning framework</b> Effects include in-combination effects that are planned for through the wider planning framework including the Tipperary County Development Plan 2022 – 2028, NPF and associated NDP, the Southern RSES, adjacent Development Plans and lower-tier land use plans.		
	<b>Significant Positive Effect, likely to occur</b>	<b>Potentially Significant Adverse Environmental Effects, if unmitigated</b>	<b>Likely Residual Adverse Non-Significant Effects</b>
<b>Biodiversity and Flora and Fauna</b>	<ul style="list-style-type: none"> <li>• Contribution towards protection of ecology (including designated sites, ecological connectivity, habitats) by facilitating development of lands (including those within and adjacent to the town) 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-served lands elsewhere in the town 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>• A focus on the Consolidation on the town centre and the reuse of vacant and regeneration sites through the Town centre First Approach, will reduce pressures on the need to develop greenfield sites.</li> </ul>	<p>Arising from both construction and operation of development and associated infrastructure:</p> <ul style="list-style-type: none"> <li>• 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;</li> <li>• Habitat loss, fragmentation and deterioration, including patch size and edge effects; and</li> <li>• Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species such as birds (e.g. swifts) and bats.</li> </ul>	<ul style="list-style-type: none"> <li>• Loss of an extent of non-protected habitats and species arising from the replacement of semi-natural land covers with artificial surfaces.</li> <li>• Losses or damage to ecology (these would be in compliance with relevant legislation).</li> </ul>
<b>Population and Human Health</b>	<ul style="list-style-type: none"> <li>• Promotion of economic growth to encourage retention of working age population and funding of sustainable development, 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 that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-served lands elsewhere in the town and beyond.</li> <li>• Contribution towards the protection of human health by facilitating development of lands 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-served lands elsewhere in the town and beyond.</li> <li>• Contribution to protection of human health and equality by the provision of active travel alternatives for transport and the development of sites closer to the town centre, thus reducing the need for travel.</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 style="list-style-type: none"> <li>• Potential adverse effects arising from flood events.</li> <li>• Potential interactions if effects arising from environmental vectors.</li> <li>• Higher dependency on the private car for transport</li> <li>• Haphazard development with poor linkages with the town centre</li> <li>• Vacancy and dereliction in the central area</li> </ul>	<ul style="list-style-type: none"> <li>• Potential interactions with residual effects on environmental vectors – please refer to residual adverse effects under “Soil”, “Water” and “Air and Climatic Factors” below.</li> </ul>

<b>Soil</b>	<ul style="list-style-type: none"> <li>• Contribution towards the protection of soils (including those used for agriculture) and designated sites of geological heritage by facilitating development of lands 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-served lands elsewhere in the town 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> <li>• Protection of greenfield sites from development by virtue of focus on the regeneration of brownfield and disused sites.</li> </ul>	<ul style="list-style-type: none"> <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> <li>• Existing disused and brownfield sites would remain</li> <li>• Potential for urban sprawl away from the centre</li> </ul>	<ul style="list-style-type: none"> <li>• Loss of an extent of soil function arising from the replacement of semi-natural land covers with artificial surfaces.</li> <li>• Riverbank erosion will continue to occur naturally over time and is likely to be enhanced by climate change.</li> </ul>
<b>Water</b>	<ul style="list-style-type: none"> <li>• Contribution towards the protection of water by facilitating development of lands 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-served lands elsewhere in the town 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 style="list-style-type: none"> <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 style="list-style-type: none"> <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>
<b>Material Assets</b>	<ul style="list-style-type: none"> <li>• Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-served lands elsewhere in the town 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 sustainable compact growth, sustainable mobility, sustainable design and energy efficiency.</li> <li>• More efficient use of existing transport infrastructure in line with the Climate Action plan 2023</li> </ul>	<ul style="list-style-type: none"> <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 runoff 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 agriculture and soil, water, biodiversity and human health - including phosphorous and nitrogen deposition as a result of agricultural activities and the production of secondary inorganic particulate matter.</li> <li>• Failure to invest in compact development, active travel and public transport thereby failing to reduce GHG emissions and dependency on the private car.</li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Residual wastes to be disposed of in line with higher-level waste management policies and will be reduced in line with the Circular Economy concept.</li> <li>• Any impacts upon public assets and infrastructure to comply with statutory planning/consent-granting framework.</li> </ul>

<b>Air and Climatic Factors</b>	<ul style="list-style-type: none"> <li>• Contribution towards climate mitigation and adaptation by facilitating compact development of lands that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-served lands elsewhere in the town 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 style="list-style-type: none"> <li>○ Sustainable compact growth;</li> <li>○ Sustainable mobility, including walking, cycling and public transport;</li> <li>○ Drainage, flood risk management and resilience;</li> <li>○ Renewable energy; and</li> <li>○ Sustainable design, energy efficiency and green and blue infrastructure.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>• 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, in particular noting the Plan will be supported by an Active travel plan.</li> <li>• 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.</li> </ul>
<b>Cultural Heritage</b>	<ul style="list-style-type: none"> <li>• Contributes towards protection of cultural heritage elsewhere in the county by facilitating development in the town.</li> <li>• Contributes towards protection of cultural heritage within the town by facilitating brownfield development and regeneration.</li> <li>• Enhancement of the setting of Roscrea Castle and its connectivity with the surrounding town centre</li> </ul>	<ul style="list-style-type: none"> <li>• Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities.</li> </ul>	<ul style="list-style-type: none"> <li>• Potential effects on known architectural and archaeological heritage and unknown archaeology however, these will occur in compliance with legislation.</li> </ul>
<b>Landscape</b>	<ul style="list-style-type: none"> <li>• Contributes towards protection of wider landscape and landscape designations by facilitating development within the town.</li> </ul>	<ul style="list-style-type: none"> <li>• Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape in the town and the surrounding rural areas.</li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>



## Section 6 Mitigation and Monitoring Measures

### 6.1 Mitigation

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<sup>16</sup>;
- Considering alternatives for the Plan<sup>17</sup>;
- Integration of environmental considerations into zoning provisions of the Plan<sup>18</sup>; and
- Integration of individual SEA, AA and SFRA provisions into the text of the Plan.

### 6.2 Monitoring

The SEA Directive requires that the significant environmental effects of the implementation of plans and programmes are monitored. Monitoring is based around indicators that allow quantitative measures of trends and progress over time relating to the Strategic Environmental Objectives identified at Table 3.1 and used in the evaluation. Monitoring indicators, targets, sources and remedial action is provided at Table 6.1 overleaf.

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<sup>16</sup> Far in advance of the placing of the Draft Plan on public display, Tipperary County Council carried out research and data analysis, including the preparation of a Strategic Issues Paper and Background papers in order to inform the preparation of the Draft Plan. The findings of this strategic work have been integrated into the Draft Plan and will contribute towards both environmental protection and management and sustainable development within the Town.

<sup>17</sup> Although strategic alternatives in relation to the content of the Plan were significantly limited for the Plan (see Section 4), 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 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.

<sup>18</sup> Environmental considerations were integrated into the Plan's zoning through an interdisciplinary approach. 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 and Southern RSES. The detailed Plan preparation process undertaken by the Planning Department combined with specialist seeks to facilitate zoning that will help to avoid inappropriate development being permitted in areas of elevated sensitivity, such as in areas at risk of flooding or ecological sensitivity. Various provisions have been integrated into the Plan that provide for flood risk management and ecological protection and management at project level. Also taken into account were environmental sensitivities relating to ecology, cultural heritage, landscape and water, as well as the overlay mapping of environmental sensitivities.

**Table 6.1 Indicators, Targets, Sources and Remedial Action**

Environmental Component	Indicators	Targets	Sources	Remedial Action
<b>Biodiversity, Flora and Fauna</b>	<ul style="list-style-type: none"> <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 town's water bodies</li> <li>Compliance of planning permissions with Plan measures providing for the protection of Biodiversity and flora and fauna</li> </ul>	<ul style="list-style-type: none"> <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 Tipperary Heritage Plan 2017-2021</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 Chapter 7</li> </ul>	<ul style="list-style-type: none"> <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>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 style="list-style-type: none"> <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>
<b>Population and Human Health</b>	<ul style="list-style-type: none"> <li>Implementation of Plan measures relating to the promotion of economic growth as provided for by Chapter 4</li> <li>Number of spatial concentrations of health problems arising from environmental factors resulting from development permitted under the Plan</li> <li>Modal shift to active travel and public transport in line with targets</li> <li>Number of spatial plans that include specific green infrastructure mapping</li> </ul>	<ul style="list-style-type: none"> <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 Chapter 4</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 style="list-style-type: none"> <li>Internal review of progress on implementing Plan objectives</li> <li>Consultations with the Health Service Executive and EPA</li> <li>CSO data</li> </ul>	<ul style="list-style-type: none"> <li>Where planning applications 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>

<b>Soil (and Land)</b>	<ul style="list-style-type: none"> <li>• Proportion of population growth occurring on infill and brownfield lands compared to greenfield</li> <li>• Volume of contaminated material generated from brownfield and infill</li> <li>• Number of AA determinations and environmental assessments undertaken to support applications for brownfield and infill development prior to planning permission</li> </ul>	<ul style="list-style-type: none"> <li>• Maintain built surface cover nationally to below the EU average of 4%</li> <li>• Achieve the 40% target for growth on infill as per NPF</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental Protection Agency (EPA), Geoportal</li> <li>• Internal monitoring of likely significant environmental effects of grants of permission (grant by grant)</li> </ul>	<p>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.</p>
<b>Water</b>	<ul style="list-style-type: none"> <li>• Status of water bodies as reported by the EPA Water Monitoring Programme for the WFD</li> <li>• Number of incompatible developments permitted within flood risk areas</li> </ul>	<ul style="list-style-type: none"> <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 River Basin Management Plan</li> <li>• Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk</li> </ul>	<ul style="list-style-type: none"> <li>• EPA Monitoring Programme for WFD compliance <sup>19</sup></li> <li>• Internal monitoring of likely significant environmental effects of grants of permission</li> </ul>	<ul style="list-style-type: none"> <li>• Where water bodies are failing to meet at least good status this will be investigated with the DHLGH 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.</li> <li>• Where planning applications are rejected due to insufficient capacity in the WWTP or failure of the WWTP to meet Emission Limit Values, the Council will consider whether it is necessary to coordinate a response with the Regional Assembly, EPA and Irish Water to achieve the necessary capacity.</li> <li>• Where planning applications are being permitted on flood zones, ensure that such grants are in compliance with the Flood Risk Management Guidelines and include appropriate flood risk mitigation and management measures.</li> </ul>

<sup>19</sup> Including monitoring of water quality and nitrogen deposition due to bioenergy and agricultural projects where available.

<b>Material Assets</b>	<ul style="list-style-type: none"> <li>• 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</li> <li>• Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the Plan</li> <li>• Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures</li> </ul>	<ul style="list-style-type: none"> <li>• To achieve the regeneration of sites as identified in Appendix 3.</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 wastewater infrastructure in line with the Roscrea DAP</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>	<ul style="list-style-type: none"> <li>• Internal monitoring of likely significant environmental effects of grants of permission Consultations with the Irish Water (see Section 10.4)</li> <li>• DHLGH in conjunction with Local Authorities</li> <li>• CSO data</li> <li>• Monitoring of Tipperary County Council’s Climate Change Adaptation Strategy 2019-2024</li> </ul>	<ul style="list-style-type: none"> <li>• Where planning applications are rejected due to insufficient capacity in the WWTP or failure of the WWTP to meet Emission Limit Values, the Council will consider whether it is necessary to coordinate 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 DHLGH, DECC and NTA to develop a tailored response.</li> </ul>
<b>Air</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>• CSO data</li> <li>• Data from the National Travel Survey</li> <li>• EPA Air Quality Monitoring</li> <li>• Consultations with Department of Transport and Department of Environment, Climate and Communications (see Section 10.4)</li> </ul>	<ul style="list-style-type: none"> <li>• Where proportion of population shows increase in private car use above CSO 2016 figures, Council will coordinate with the Regional Assembly, DHLGH, DECC and NTA to develop a tailored response. See also entry under Population and human health above</li> </ul>

<b>Climatic Factors</b> <sup>20</sup>	C	<ul style="list-style-type: none"> <li>• Implementation of Plan measures relating to climate reduction targets</li> <li>• A competitive, low-carbon, climate-resilient and environmentally sustainable economy</li> <li>• Share of renewable energy in transport</li> <li>• Carbon dioxide (CO<sub>2</sub>) emissions across the electricity generation, built environment and transport sectors</li> <li>• Energy consumption, the uptake of renewable options and solid fuels for residential heating</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 style="list-style-type: none"> <li>• For review of progress on implementing Plan objectives to demonstrate successful implementation of measures relating to climate reduction targets, including renewable energy production</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 facilitating the development of electricity charging and transmission infrastructure, in compliance with the provisions of the Plan</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> <li>• Decrease in the proportion of journeys made by residents of the Town using private fossil fuel-based car compared to 2016 levels</li> <li>• Increase in the proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures</li> </ul>	<ul style="list-style-type: none"> <li>• Internal monitoring of likely significant environmental effects of grants of permission</li> <li>• Monitoring of Tipperary County Council's Climate Change Adaptation Strategy 2019-2024</li> <li>• EPA Annual National Greenhouse Gas Emissions Inventory reporting</li> <li>• Climate Action Regional Office</li> <li>• Consultations with DECC (at monitoring evaluation - see Section 10.4)</li> <li>• CSO data</li> <li>• Monitoring of Tipperary County Council's Climate Change Adaptation Strategy 2019-2024</li> <li>• CSO data</li> <li>• Monitoring of Tipperary County Council's Climate Change Adaptation Strategy 2019-2024</li> </ul>	<ul style="list-style-type: none"> <li>• Review internal systems</li> <li>• Where targets are not achieved, the Council will liaise with the Regional Assembly and the Eastern and Midlands Climate Action Regional Office to establish reasons and develop solutions.</li> <li>• Where trends toward carbon reduction are not recorded, the Council will liaise with the Regional Assembly and the Eastern and Midlands Climate Action Regional Office to establish reasons and develop solutions.</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 DHLGH, DECC and NTA to develop a tailored response.</li> </ul>
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<sup>20</sup> Please also refer to relevant legislation and requirements under Section 4.10, Section 8.6, Section 9 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.

<b>Cultural Heritage</b>	CH	<ul style="list-style-type: none"> <li>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</li> <li>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</li> </ul>	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>Internal monitoring of likely significant environmental effects of grants of permission</li> <li>Consultation with DHLGH (see Section 10.4).</li> </ul>	<ul style="list-style-type: none"> <li>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, Fáilte Ireland and the National Monuments Service and other stakeholders, as relevant, to address pressures through additional mitigation.</li> </ul>
Landscape	L	<ul style="list-style-type: none"> <li>Number of developments permitted that result in avoidable adverse visual impacts on the landscape, especially with regard to landscape designations, resulting from development which is granted permission under the Plan</li> </ul>	<ul style="list-style-type: none"> <li>Minimise the impact of developments permitted which result in avoidable adverse visual impacts on the landscape, especially with regard to landscape designations, resulting from development which is granted permission under the Plan</li> </ul>	<ul style="list-style-type: none"> <li>Internal monitoring of likely significant environmental effects of grants of permission</li> </ul>	<ul style="list-style-type: none"> <li>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</li> </ul>