



Comhairle Contae Thiobraid Árann  
Tipperary County Council

# **Nenagh & Environs Local Area Plan 2024 - 2030**

**Appendix 4 Strategic Environmental Assessment Environmental  
Report and Non-Technical Summary**

**Appendix 5 Appropriate Assessment Conclusion Statement**

**Appendix 6 Strategic Flood Risk Assessment**

March 2024



# SEA ENVIRONMENTAL REPORT

---

FOR THE

## NENAGH AND ENVIRONS LOCAL AREA PLAN 2024-2030

**for: Tipperary County Council**

Civic Offices  
Nenagh  
County Tipperary



Comhairle Contae Thiobraid Árann  
Tipperary County Council

**by: CAAS Ltd.**

1<sup>st</sup> Floor  
24-26 Ormond Quay Upper  
Dublin 7



**MARCH 2024**

# Table of Contents

<b>List of Abbreviations .....</b>	<b>v</b>
<b>Glossary .....</b>	<b>vi</b>
<b>Section 1 SEA: Introduction and Benefits .....</b>	<b>1</b>
1.1 Introduction.....	1
1.2 Implications for the Planning Authority .....	1
1.3 Why SEA? The Benefits .....	1
<b>Section 2 The Plan.....</b>	<b>3</b>
2.1 Introduction.....	3
2.2 Summary of the Plan.....	3
2.3 Strategic work undertaken by the Council to ensure contribution towards environmental protection and sustainable development.....	4
2.4 Relationship with other relevant Plans and Programmes .....	4
<b>Section 3 SEA Methodology.....</b>	<b>6</b>
3.1 Introduction to the Iterative Approach .....	6
3.2 Appropriate Assessment and Integrated Biodiversity Impact Assessment .....	6
3.3 Strategic Flood Risk Assessment .....	7
3.4 Scoping .....	7
3.5 Alternatives .....	7
3.6 Environmental Report.....	7
3.7 SEA Statement.....	8
<b>Section 4 Environmental Baseline.....</b>	<b>10</b>
4.1 Introduction.....	10
4.2 National Reporting on the Environment .....	10
4.3 Sustainable Development Goals .....	10
4.4 Likely Evolution of the Environment in the Absence of a new Plan .....	11
4.5 Natural Capital and Ecosystem Services .....	13
4.6 Biodiversity and Flora and Fauna.....	13
4.7 Population and Human Health.....	22
4.8 Soil .....	23
4.9 Water.....	27
4.10 Air and Climatic Factors .....	35
4.11 Material Assets.....	38
4.12 Cultural Heritage.....	41
4.13 Landscape .....	46
<b>Section 5 Strategic Environmental Objectives .....</b>	<b>48</b>
<b>Section 6 Description of Alternatives.....</b>	<b>53</b>
6.1 Introduction.....	53
6.2 Limitations in Available Alternatives.....	53
6.3 Description of Alternatives Considered.....	53
<b>Section 7 Evaluation of Alternatives .....</b>	<b>56</b>
7.1 Introduction.....	56
7.2 Methodology.....	56

7.3	Detailed Assessment of Alternatives .....	59
7.4	Selected Alternatives .....	65
<b>Section 8</b>	<b>Evaluation of Plan Provisions .....</b>	<b>66</b>
8.1	Introduction.....	66
8.2	Cumulative Effects .....	68
8.3	Overall Evaluation .....	70
8.4	Appropriate Assessment and Strategic Flood Risk Assessment.....	75
8.5	Interactions with Climate Mitigation and Adaptation .....	75
8.6	Interrelationship between Environmental Components.....	76
8.7	Detailed Evaluation .....	78
<b>Section 9</b>	<b>Mitigation Measures .....</b>	<b>90</b>
9.1	Introduction.....	90
9.2	Strategic work undertaken by the Council to ensure contribution towards environmental protection and sustainable development.....	90
9.3	Consideration of Alternatives .....	90
9.4	Integration of environmental considerations into the Zoning provisions of the Plan.....	91
9.5	Integration of individual provisions into the text of the Plan .....	91
9.6	Integration of individual provisions into the text of the Development Plan .....	91
<b>Section 10</b>	<b>Monitoring Measures .....</b>	<b>103</b>
10.1	Introduction.....	103
10.2	Indicators and Targets .....	103
10.3	Sources .....	103
10.4	Reporting .....	104
<b>Appendix I</b>	<b>Relationship with Legislation and Other Policies, Plans and Programmes.....</b>	<b>110</b>
<b>Appendix II</b>	<b>Non-Technical Summary... ..</b>	<b>Separately bound</b>

## List of Figures

Figure 4.1 European sites within and within a 15 km buffer of the Plan area .....	18
Figure 4.2 NHAs and pNHAs within and within a 15 km buffer of the Plan area.....	19
Figure 4.3 CORINE Land Cover Mapping 2018.....	20
Figure 4.4 Areas Likely to Contain Annex I Habitats.....	21
Figure 4.5 Soil types.....	25
Figure 4.6 Landslide susceptibility .....	26
Figure 4.7 WFD Surface Waterbodies and WFD Ground WaterbodiesStatus (2016-2021).....	30
Figure 4.8 Groundwater Vulnerability .....	31
Figure 4.9 Aquifer Productivity .....	32
Figure 4.10 WFD RPA Drinking Water .....	33
Figure 4.11 OPW Past Flood Events.....	34
Figure 4.12 Archaeological Heritage .....	44
Figure 4.13 Architectural Heritage .....	45
Figure 4.14 Landscape Character Areas .....	47

## List of Tables

Table 3.1 Checklist of Information included in this Environmental Report.....	9
Table 4.1 NHAs and pNHAs within and within 15 km of the Plan area.....	15
Table 5.1 Strategic Environmental Objectives (SEOs), Indicators and Targets .....	49
Table 7.1 Strategic Environmental Objectives.....	56
Table 7.2 Criteria for appraising the effect of the Alternatives on SEOs.....	58
Table 7.3 Effects Common to All Alternatives .....	59
Table 7.4 Assessment of Type 1 Alternatives against SEOs .....	61
Table 7.5 Assessment of Type 2 Alternatives against SEOs .....	63
Table 7.6 Assessment of Type 3 Alternatives against SEOs .....	64
Table 7.7 Assessment of Type 4 Alternatives against SEOs .....	65
Table 8.1 Strategic Environmental Objectives.....	66
Table 8.2 Criteria for appraising the effect of the Plan provisions on SEOs .....	68
Table 8.3 Overall Evaluation – Effects arising from the Plan .....	71
Table 8.4 Presence of Interrelationships between Environmental Components .....	77
Table 9.1 Integration of Environmental Considerations into the Plan .....	92
Table 10.1 Indicators, Targets, Sources and Remedial Action.....	105

## List of Abbreviations

<b>AA</b>	Appropriate Assessment
<b>ABTA</b>	Area Based Transport 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>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>SRA</b>	Southern Regional Assembly
<b>EPA</b>	Environmental Protection Agency
<b>EQS</b>	Environmental Quality Standard
<b>EU</b>	European Union
<b>GSi</b>	Geological Survey of Ireland
<b>LA</b>	Local Authority
<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>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>SPA</b>	Special Protection Area
<b>TPOs</b>	Tree Preservation Orders
<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organisation
<b>WHO</b>	World Health Organisation
<b>WFD</b>	Water Framework Directive
<b>WWTP</b>	Waste Water 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 can be evaluated in order to help identify which provisions would be likely to result in significant environmental effects and where such effects would be likely to occur, if - in the case of adverse effects - unmitigated.

# Section 1 SEA: Introduction and Benefits

## 1.1 Introduction

This is the Strategic Environmental Assessment (SEA) Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030. It has been undertaken by CAAS Ltd. on behalf of Tipperary County Council. The purpose of this report is to provide a clear understanding of the likely environmental consequences of decisions regarding the adoption and implementation of the Plan.

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

The SEA has been undertaken in order to comply with European SEA Directive<sup>1</sup>, and transposing Regulations, 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. Under the Planning and Development (SEA) Regulations 2004 (S.I. No. 436 of 2004) as amended by the Planning and Development (SEA) (Amendment) Regulations 2011, (S.I. No. 201 of 2011), there is a requirement for Strategic Environmental Assessment (SEA) of all Local Area Plans for areas that have a population or target population of 5,000 persons or more. The Nenagh LAP area has a

population exceeding this threshold; therefore, SEA is required as a part of the Plan-making process.

## 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, an earlier version of which accompanied the Draft Plan on public display and has been updated following consultation, and identifies how environmental considerations were integrated into the Plan and how alternatives for the Plan were considered.

The planning authority has taken into account the findings of this report and other related SEA output during the Plan preparation process.

Following adoption of the Plan, an SEA Statement is prepared that summarises, inter alia, how environmental considerations have been integrated into the Plan.

## 1.3 Why SEA? The Benefits

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

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

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

---

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

European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011 (SI No. 200 of 2011), and the Planning and Development (SEA) Regulations 2004 (SI No. 436 of 2004), as amended by the Planning and Development (SEA) (Amendment) Regulations 2011 (SI No. 201 of 2011).

granted permission. Environmental mitigation is more likely to cost less.

The Plan directs incompatible development away from the most sensitive areas of Nenagh. Development of generally more robust, well-serviced and well-connected areas will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation.

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

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

## Section 2 The Plan

### 2.1 Introduction

Tipperary County Council has adopted a Local Area Plan (LAP) for Nenagh under the Planning and Development Act 2000 (as amended). The Plan sets out an overall strategy for the proper planning and sustainable development over the years 2024-2030.

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

The LAP should be read in conjunction with the Tipperary County Development Plan 2022-2028, which sets out the overarching development strategy for the administrative area of Tipperary County Council. Where conflicting policies and objectives arise between the LAP and the County Development Plan the County Development Plan shall take precedence.

### 2.2 Summary of the Plan

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

The function of the Plan is to act as a framework for sustainable investment, to enable employment and homes, to protect the environment and heritage and to help deliver a good quality of life for everyone.

The LAP is comprised of the following documents:

- A Written Statement with specific policies and objectives laid out across ten sections
- Maps including land-use zoning with flood risk areas, and built and natural heritage

- Appendices as follows:
  1. Serviced Land Assessment
  2. Local Transport Plan
  3. Regeneration Sites
  4. Strategic Environmental Assessment Environmental Report and Non-Technical Summary
  5. Appropriate Assessment Natura Impact Report
  6. Strategic Flood Risk Assessment

The LAP is focused on a renewed and targeted approach to compact growth and regeneration, building on the extensive range of 'town-centre' focused projects already initiated in Nenagh. The town centre will form the heart and focal point of Nenagh, with clear consideration of climate change mitigation and adaptation measures and modal shift change in terms of how we get around. At the centre of this LAP is consideration of quality of life for the community in the form of housing, jobs, education and amenities.

Part of the Plan's Vision and Planning and Development Strategy is that: "In 2030, Nenagh will be a vibrant, sustainable and age-friendly community. The community will benefit from a high quality of life, quality housing choices, improved access to employment options and an improved range of services in the town. The town will benefit from significant investment and regeneration in the central areas of the town, enhanced social, cultural and tourism activities in the town, an increasing town centre residential population, and thriving and vibrant local businesses and services."

The Plan's overarching Planning and Development Policies are as follow:

- Policy 2.1 Require the retrofitting of existing structures on brownfield sites, unless it is demonstrated that retrofitting is unfeasible, or redevelopment of the site would provide positive carbon impact through the re-design, construction and use stages of a new building, compared with retrofitting.
- Policy 2.2 Support new development that will enable sustainable housing growth, employment, community development and prosperity for

Nenagh as a Key Town in line with the Strategic Objectives of the TCDP.

- Policy 2.3 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 Tipperary County Council Climate Action Plan 2024-2029 (and any review thereof).
- Policy 2.4 Support compact residential growth in Nenagh through the sustainable intensification and consolidation of the town centre and established residential areas to meet identified housing targets and requirements in line with the Sustainable Residential Development and Compact Settlements Guidelines for Planning Authorities (DHLGH, 2024) and any review thereof.
- Policy 2.5 Facilitate development of existing but non-conforming and long-established uses, to support their continued operation and expansion, provided such does not result in loss of amenity to adjoining properties, adverse impact on the environment, visual detriment to the character of the area or creation of a traffic hazard.

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

In advance of the placing of the Draft Plan on public display, Tipperary County Council undertook various works in order to inform the preparation of the Plan. This included a detailed population analysis and preparation of a Local Transport Plan and Serviced Land Assessment, which have informed and are appended to the Plan.

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

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

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

Many of the major issues affecting Nenagh's development are contingent on national policy and government funding. The Plan sits within a hierarchy of statutory documents setting out public policy for, among other things, land use planning, infrastructure, sustainable development, tourism, environmental protection and environmental management. The Plan must comply with relevant higher-level strategic actions and may, in turn, guide lower-level strategic actions. These documents include plans and programmes such as those detailed in Appendix I<sup>2</sup> (see also, Section 4 "Environmental Baseline", Section 5 "Strategic Environmental Objectives", Section 6 "Description of Alternatives" and Section 9 "Mitigation Measures"). These documents have

---

<sup>2</sup> Appendix I is not intended to be a full and comprehensive review of EU Directives, the transposing regulations or the regulatory framework for environmental protection and management. The

information is not exhaustive and it is recommended to consult the Directive, Regulation, Plan or Programme to become familiar with the full details of each.

been subject to their own environmental assessment processes, as relevant.

The National Planning Framework (NPF) sets out Ireland's planning policy direction up to 2040. The NPF is to be implemented through Regional Spatial and Economic Strategies (RSEs) and lower tier Development Plans and Local Area Plans. The RSE for the Southern Region sets out objectives for land use planning, infrastructure, sustainable development, environmental protection and environmental management that have been subject to environmental assessment and must be implemented through the Tipperary County Development Plan 2022-2028, which sets out the overarching development strategy for the administrative area of Tipperary County Council, and the Local Area Plan.

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

## Section 3 SEA Methodology

### 3.1 Introduction to the Iterative Approach

The preparation of the Plan, SEA, AA and SFRA

have taken place concurrently and the findings of the SEA, AA and SFRA have informed the Plan.

### 3.2 Appropriate Assessment and Integrated Biodiversity Impact Assessment

#### 3.2.1 Appropriate Assessment

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

The conclusion of the Stage 2 AA is that, following the application of mitigation, the Plan will not affect the integrity of the European Sites, alone or in combination with other plans or projects.<sup>3</sup>

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

#### 3.2.2 Integrated Biodiversity Impact Assessment

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

These include:

#### Scoping

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

#### Baseline

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

#### Alternatives

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

#### Impact assessment

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

#### Mitigation and monitoring

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

#### Reporting

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

#### Communication and consultation

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

<sup>3</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.

assessment undertaken, the findings of which are included in this report.

### **3.3 Strategic Flood Risk Assessment**

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

### **3.4 Scoping**

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

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

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

Submissions made by the environmental authorities influenced the scope of the

### **3.5 Alternatives**

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

### **3.6 Environmental Report**

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

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

An earlier version of this report was updated in order to take account of relevant recommendations contained in submissions and in order to take account of changes that were made to the original, Draft Plan that was placed on public display.

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

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

---

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

<sup>5</sup> The following authorities were notified: Environmental Protection Agency; Department of Environment, Climate and Communications; Department of Agriculture, Food and the Marine; Department of Housing, Local Government and Heritage; Galway County Council; Clare County Council; Limerick City and County Council; Cork County Council; Waterford County Council; Kilkenny County Council; Laois County Council; and Offaly County Council.



### **3.7 SEA Statement**

On finalisation of the Plan, an SEA Statement is prepared that includes information on:

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

**Table 3.1 Checklist of Information included in this Environmental Report**

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

## Section 4 Environmental Baseline

### 4.1 Introduction

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

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

### 4.2 National Reporting on the Environment

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

#### Environmental Policy Position

A national policy position for Ireland's Environment.

#### Full implementation

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

#### Health and Wellbeing

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

#### Climate

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

#### Air Quality

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

#### Nature

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

#### Water Quality

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

#### Marine

Reduce the human-induced pressures on the marine environment.

#### Clean Energy

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

#### Environmentally Sustainable Agriculture

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

#### Water Services

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

#### Circular Economy

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

#### Land Use

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

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

### 4.3 Sustainable Development Goals

Implementation of the Plan will contribute towards efforts to achieve a number of the 17 Sustainable Development Goals of the 2030 Agenda for Sustainable Development, which were adopted by world leaders in 2015 at a

<sup>6</sup> 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.

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

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

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

- Contribution towards protection of ecology (including designated sites, ecological connectivity, habitats) by facilitating development of lands (including those within and adjacent to the Plan area's existing built-up footprint) 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 County and beyond.
- Contribution towards the maintenance of existing green infrastructure and associated ecosystem services, listed species, ecological connectivity and non-designated habitats.

- Contribution towards protection and/or maintenance of biodiversity and flora and fauna by contributing towards the protection of natural capital including the environmental vectors of air, water and soil. Biodiversity and flora and fauna includes biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species (including birds and bats), listed/protected species, ecological connectivity and non-designated habitats (including terrestrial and aquatic habitats), and disturbance to biodiversity and flora and fauna – including terrestrial and aquatic biodiversity and flora and fauna.
- Sustains existing sustainable rural management practices – and the communities who support them – to ensure the continuation of 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 (including those within and adjacent to the Plan area's existing built-up footprint) 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 County and beyond.
- Contribution towards the protection of human health by facilitating development of lands (including those within and adjacent to the Plan area's existing built-up footprint) 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 County and beyond.
- Contributes towards protection of human health as a result of contributing towards the protection of natural capital including environmental vectors, including air and water.
- Contribution towards the protection of soils (including those used for agriculture) and designated sites of geological heritage by facilitating development of lands (including those within and adjacent to the Plan area's existing built-up footprint) 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 County and beyond.
- Contribution towards the protection of the environment from contamination the highest standards of remediation, and where appropriate to consultations with the EPA and other relevant bodies, will be required to resolve any instances of environmental pollution created by contaminated land.
- Contribution towards the protection of water by facilitating development of lands (including those within and adjacent to the Plan area's existing built-up footprint) 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 County and beyond.
- Contributions towards the protection of water resources including the status of surface and groundwaters and water-based designations.
- Contribution towards flood risk management and appropriate drainage.
- Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands (including those within and adjacent to the Plan area's existing built-up footprint) 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 County and beyond.
- Contribution towards compliance with national and regional water services and waste management policies.
- Contribution towards increase in renewable energy use by facilitating renewable energy and electricity transmission infrastructure developments.
- Contribution towards limits in increases in energy demand from the transport sector by facilitating sustainable compact growth.
- Contribution towards reductions in average energy consumption per capita including promoting sustainable compact growth, sustainable mobility, sustainable design and energy efficiency.
- Contribution towards climate mitigation and adaptation by facilitating compact development of lands (including those within and adjacent to the Plan area's existing built-up footprint) 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 County and beyond.
- In combination with other plans, programmes etc., contribution towards the objectives of the wide policy framework relating to climate mitigation and adaptation, and associated contribution towards maintaining and improving air quality and managing noise levels, including through measures relating to:
  - Sustainable compact growth;
  - Sustainable mobility, including walking, cycling and public transport;
  - Drainage, flood risk management and resilience;
  - Renewable energy; and
  - Sustainable design, energy efficiency and green and blue infrastructure.
- Contributes towards protection of cultural heritage elsewhere in the County by facilitating development within the town.
- 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.
- 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.

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

## 4.5 Natural Capital and Ecosystem Services

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

In recognition of the need to manage natural capital, provisions have been integrated into the Local Area Plan and the associated higher-tier Tipperary County Development Plan 2022-2028 that will contribute towards management of air quality, noise pollution, light pollution, water quality and integrated catchment management.

Ecosystems are multifunctional communities of living organisms interacting with each other and their environment. Ecosystems provide a series of services for human well-being (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>7</sup>.

In preparing the Plan and developing policy objectives, the Council have followed these ecosystem services approach principles (including through the strategic aims and various policy objectives):

- a) Consideration of natural systems - by using knowledge of interactions in nature and how ecosystems function.
- b) Taking into account of the services that ecosystems provide - including those that underpin social and economic well-being, such as flood and climate regulation, resources for food, fibre or fuel, or for recreation, culture and quality of life.
- c) Involving people - those who benefit from the ecosystem services and those managing them need to be involved in decisions that affect them.

The following natural capital and ecosystem services issues are relevant to this SEA and have been taken into account in the provisions of the Local Area Plan and the associated higher-tier Tipperary County Development Plan 2022-2028:

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

## 4.6 Biodiversity and Flora and Fauna

### 4.6.1 Overview

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

<sup>7</sup> <https://biodiversity.europa.eu/topics/ecosystem-services>

Key ecological sensitivities within and surrounding the Plan area include:

- **Aquatic and riverine ecology associated with the area's streams and rivers, their tributaries and riparian buffer zones**, including the **Nenagh River** (flowing east of the Plan area) and the **Ollatrim River** (joining the Nenagh River east of Nenagh town), their tributaries and riparian buffer zones;
- **Locally important habitats within the Plan area**, including various woodlands, trees, parks, gardens, hedgerows, old buildings/stone walls, railway lines, pollinator sites and lands used for agriculture within and surrounding the Plan area, providing habitats for flora and fauna and facilitating linkages and corridors to the surrounding countryside for the wildlife; and
- **Designated sites within 15 km of the Plan area**, including the Lough Ourna proposed Natural Heritage Area, located c. 5 km to the north of the Plan area, and the Lough Derg Special Protection Area and proposed Natural Heritage Area, located c. 6 km to the west of the Plan area.

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

- Watercourses, wetlands and peatlands;
- Other relevant County Development Plans designations;
- The EPA's Framework National Ecological Network for Ireland<sup>8</sup>;
- Pollinator Areas; and
- Other sites of high biodiversity value or ecological importance as identified by, for example, the Department of Agriculture, Food and the Marine

<sup>8</sup> The EPA's Framework National Ecological Network provides a classification of the relative importance of areas by virtue of the biodiversity and flora that they contain and the connectivity they provide. Many of the areas identified are corridors.

<sup>9</sup> SACs have been selected for protection under the European Council Directive on the conservation of natural habitats and of wild fauna and flora (92/43/EEC) due to their conservation value for habitats and species of importance in the European Union. The Habitats Directive seeks to establish Natura 2000, a network of protected areas throughout the EU. It is the responsibility of each member state to designate SACs to protect habitats and species, which, together with the SPAs designated under the 1979 Birds Directive, form Natura 2000. The European Communities (Birds and Natural Habitats) Regulations 2011 consolidate the European Communities (Natural Habitats) Regulations 1997 to 2005 and the European Communities (Birds and Natural Habitats) (Control of Recreational Activities) Regulations 2010. The Regulations have been prepared to address several judgments of the Court of Justice of the European Union (CJEU) against Ireland, notably cases C-418/04 and C-183/05, in respect of failure to transpose elements of the Birds Directive and the Habitats Directive into Irish law.

<sup>10</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.

(badger sets), relevant datasets from the National Biodiversity Data Centre and BirdWatch Ireland's 'Important Bird Areas' (Crowe et al., 2009).

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

## 4.6.2 European Sites

European sites comprise Special Areas of Conservation<sup>9</sup> (SACs) and Special Protection Areas<sup>10</sup> (SPAs). Such sites within 15 km buffer around the Plan area are mapped on Figure 4.1). There are no SACs or SPAs designated within the Plan area; however, there are a total of ten European sites (seven SACs and three SPAs) within 15 km of the Plan boundary (as listed below and shown on Figure 4.1):

- Lough Derg (Shannon) SPA (Site Code: 004058)<sup>11</sup>;
- Slievefelim to Silvermines Mountains SPA (Site Code 004165)<sup>12</sup>;
- Silvermine Mountains SAC (Site Code: 000939)<sup>13</sup>;
- Silvermines Mountains West SAC (Site Code: 002258)<sup>14</sup>;
- Bolingbrook Hill SAC (Site Code: 002124)<sup>15</sup>;
- Lough Derg, North-East Shore SAC (Site Code: 002241)<sup>16</sup>;
- Lower River Shannon SAC (Site Code: 002165)<sup>17</sup>;

<sup>11</sup> Sensitive features comprise: wetland and waterbirds; tufted duck; goldeneye; common tern; and cormorant.

<sup>12</sup> Sensitive features comprise: hen harrier.

<sup>13</sup> Sensitive features comprise: Northern Atlantic wet heaths with *Erica tetralix*.

<sup>14</sup> Sensitive features comprise: European dry heaths; calamarian grasslands of the *Violetalia calaminariae*; and Northern Atlantic wet heaths with *Erica tetralix*.

<sup>15</sup> Sensitive features comprise: European dry heaths; species-rich Nardus grasslands, on siliceous substrates in mountain areas - and submountain areas in Continental Europe; and Northern Atlantic wet heaths with *Erica tetralix*.

<sup>16</sup> Sensitive features comprise: limestone pavements; alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior*; *Juniperus communis* formations on heaths or calcareous grasslands; *Taxus baccata* woods of the British Isles; Alkaline fens; and calcareous fens with *Cladium mariscus* and species of the *Caricion davalliana*.

<sup>17</sup> Sensitive features comprise: otter; freshwater pearl mussel; large shallow inlets and bays; Mediterranean salt meadows; bottlenose dolphin; brook lamprey; coastal lagoons; Atlantic salt meadows; water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitriche-Batrachion* vegetation; *Salicornia* and other annuals colonising mud and sand; perennial vegetation of stony banks; estuaries; river lamprey; mudflats and sandflats not covered by seawater at low tide; sandbanks which are slightly covered by sea water all the time; Atlantic salmon; vegetated sea cliffs of the Atlantic and Baltic

- Keeper Hill SAC (Site Code: 001197)<sup>18</sup>;
- Slieve Aughty Mountains SPA (Site Code: 004168)<sup>19</sup>; and
- Scohaboy (Sopwell) Bog SAC (Site Code: 002206)<sup>20</sup>.

There is one hydrologically connected European site within the wider region beyond 15 km buffer zone (i.e. downstream of the Plan boundary)<sup>21</sup>, the River Shannon and River Fergus Estuaries SPA (Site Code: 004077).<sup>22</sup>

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

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

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

There are no NHAs or pNHAs designated within the Plan boundary. There are a total of three NHAs and eleven pNHAs designated within a 15 km buffer of the Plan area, as mapped on Figure 4.2 and listed on Table 4.1.

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

NHAs and pNHAs		
Designation	Site Code	Site Name
NHA	000937	Scohaboy Bog
	002450	Bleanbeg Bog
	002385	Mauherslieve Bog
pNHA	001995	Lough Avan
	000011	Lough Derg
	000653	Newchapel Turlough
	000943	Willsborough Esker
	000929	Clareen Lough
	000650	Lough Ourna
	000882	Ballintemple Bog
	001178	Killavalla Bog
	000939	Silvermine Mountains
	001133	Nenagh River Gorge
	001197	Keeper Hill

### 4.6.4 Land Cover

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

The CORINE 2018<sup>23</sup> mapping (as shown on Figure 4.3) identifies the land cover within central parts of the Plan area as urban fabric with adjacent industrial or commercial units in the south-east and south-west of the Plan area and mineral extraction sites in the west of the Plan area. The surrounding hinterland consists mainly of pastures and agricultural land with significant areas of natural vegetation.

There is also an area of mixed forest to the north-west of the Plan area likely, considering the CORINE data, to contain Annex I Habitats (as shown on Figure 4.4).

coasts; *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils; sea lamprey; alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior*; and reefs.

<sup>18</sup> Sensitive features comprise: blanket bogs; and Northern Atlantic wet heaths with *Erica tetralix*.

<sup>19</sup> Sensitive features comprise: merlin; and hen harrier.

<sup>20</sup> Sensitive features comprise: degraded raised bogs still capable of natural regeneration.

<sup>21</sup> There are also three additional European sites with groundwater sensitive Qualifying Interests and within the same groundwater bodies as the Plan area, but beyond 15 km buffer zone, namely: Kilcarren-Firville Bog SAC (Site Code: 000647); River Shannon Callows SAC (Site Code:

000216); and Arragh More (Derrybreen) Bog (Site Code: 002207). For more detail refer to AA NIR report.

<sup>22</sup> Sensitive features comprise: golden plover; greenshank; grey plover; ringed plover; scaup; shelduck; shoveler; teal; wetland and waterbirds; whooper swan; wigeon; knot; lapwing; light-bellied brent goose; pintail; redshank; bar-tailed godwit; black-headed gull; black-tailed godwit; cormorant; curlew; and dunlin.

<sup>23</sup> The CORINE (Co-ordinated Information on the Environment) land cover data series was devised as a means of compiling geo-spatial environmental information in a standardised and comparable manner.



#### 4.6.5 Register of Protected Areas

In response to the requirements of the Water Framework Directive (WFD) a number of water bodies or parts of water bodies that must have extra controls on their quality by virtue of how their waters are used by people and by wildlife have been listed on Registers of Protected Areas (RPAs). Entries to the RPAs within and adjacent to the Plan area, designated by virtue of their value to biodiversity include a number of water-dependent habitats within the area that have been listed on RPAs relating to biodiversity – these relate to designated SACs and SPAs (see Section 4.6.2) and associated surface and groundwaters.

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

#### 4.6.6 Other Local Sites of High Biodiversity Value or Ecological Importance

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. They are composed of linear features, such as tree lines, hedgerows and rivers/streams, which provide corridors or stepping stones for wildlife species moving within their normal range. They are important for the migration, dispersal and genetic exchange of species of flora and fauna particularly for mammals, especially for bats and small birds and facilitate linkages both between and within designated ecological sites, the non-designated surrounding countryside and urban areas.

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

Man-made habitats within the Plan area can also include important biodiversity features. Gardens provide habitats for a range of wildlife including various bird species, invertebrates such as bees and butterflies and mammals such

as hedgehogs, mice, rats and foxes. These species move around between gardens using hedgerows and vegetated areas. These urban green spaces are of importance as they form part of a network of green spaces across the Plan area including gardens, parks, graveyards, amenity walks, old railway lines and patches of woodland and scrub within which animals and plants continue to thrive.

Ecological islands or areas of habitat that are not connected to surrounding ecologically valuable habitats can also be important. Biodiversity of the Plan area encompasses the various parklands, individual gardens, communal open spaces, cemeteries, waterways (including the Nenagh River and Ollatrim River), greens strips and wildlife areas, which adjoin the roads and streets, and the various species - both plant and animal - that occupy and/or pass through these areas.

The Plan sets out overarching objectives and more specific actions, the implementation of which will help to ensure the protection and restoration of the identified sites of high biodiversity value or ecological importance. These sites does not preclude development of the lands subject to assessment under the planning process and subject to any other legal obligations.

#### 4.6.7 Existing Problems

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

- Agriculture;
- Forestry;
- 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, no pressures and pressures from outside the Member State.

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

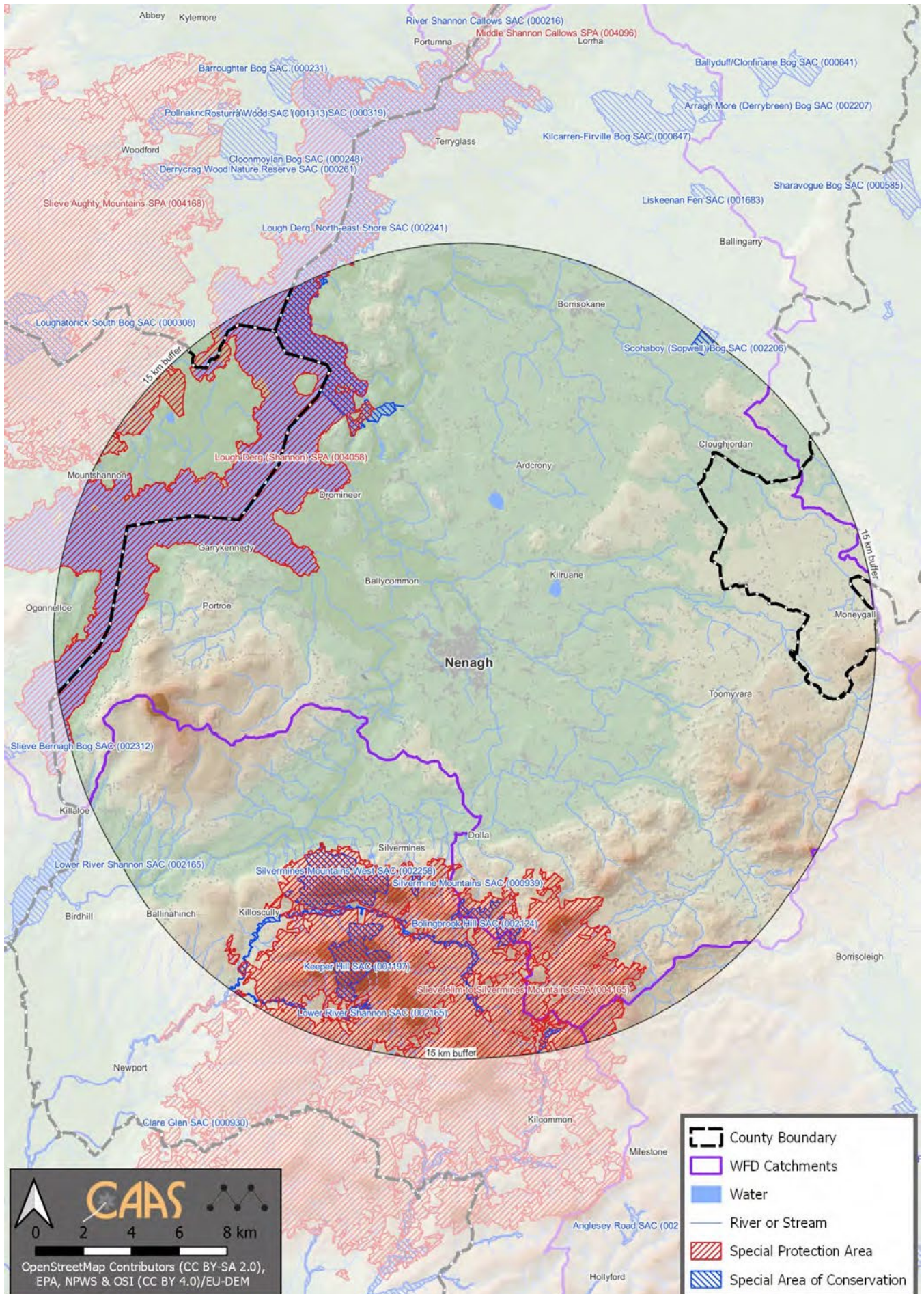


Figure 4.1 European sites within and within a 15 km buffer of the Plan area

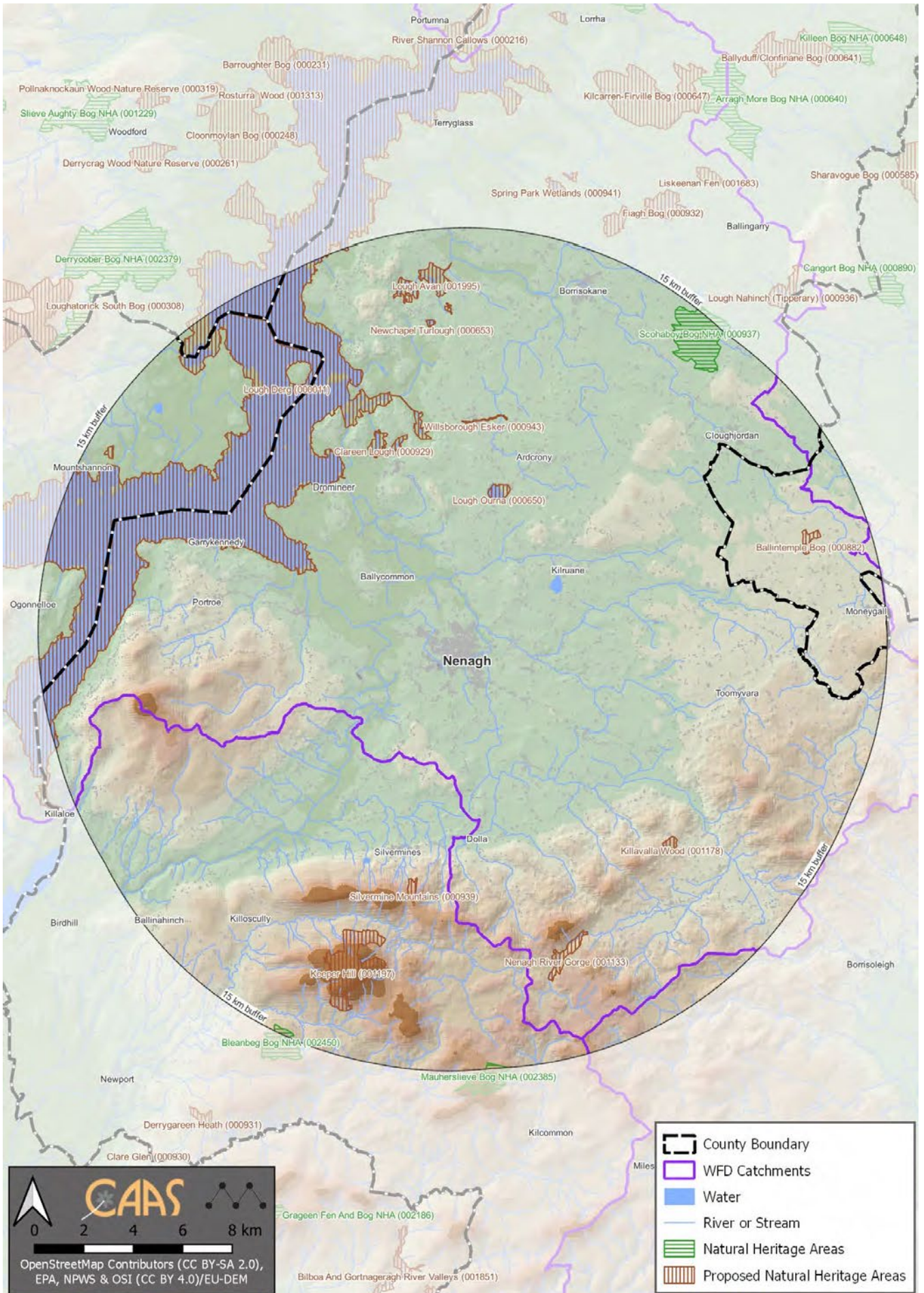
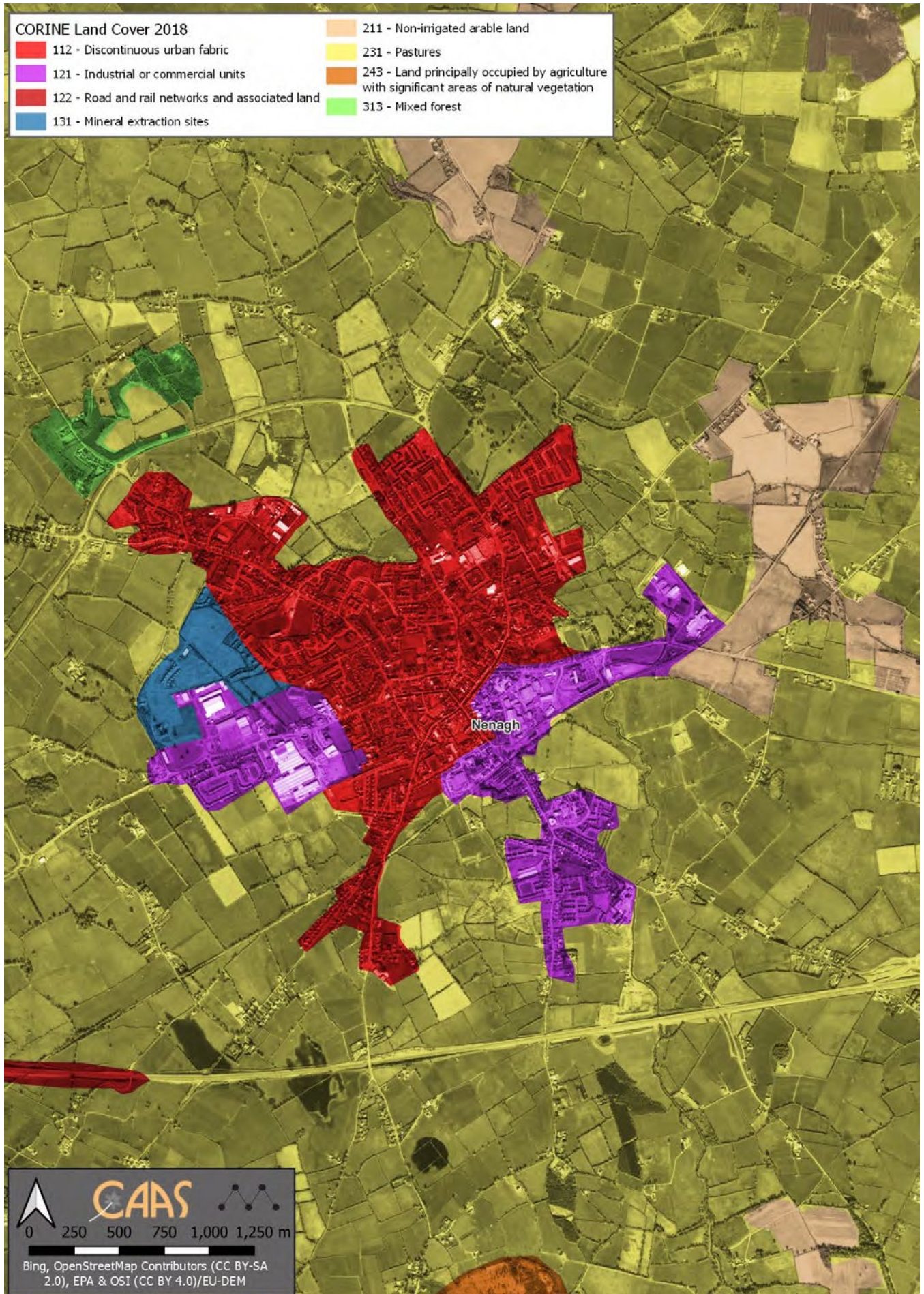
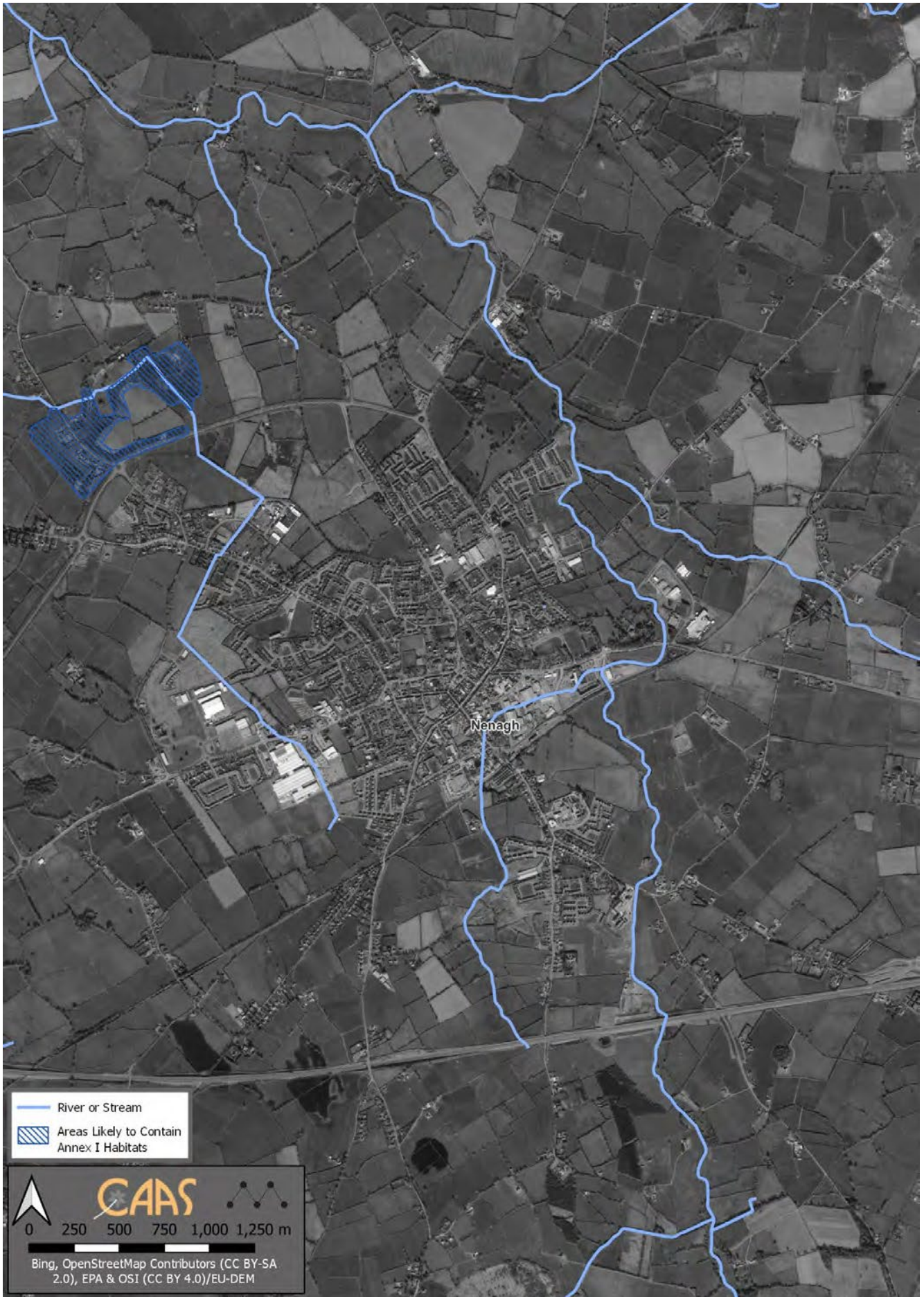


Figure 4.2 NHAs and pNHAs within and within a 15 km buffer of the Plan area



**Figure 4.3 CORINE Land Cover Mapping 2018**



**Figure 4.4 Areas Likely to Contain Annex I Habitats**

- Potential interactions in flood-sensitive areas; and
- Potential effects on water quality.

## 4.7 Population and Human Health

### 4.7.1 Population

Census 2016 has recorded a population of 8,968 persons within the Plan area<sup>24</sup>. The Core Strategy in the Tipperary County Development Plan 2022-2028 provides for a population increase of 1,793 persons for Nenagh over the Plan period.

Census 2022 identified that the Built-up Area (BUA(w)) of Nenagh had population of 9,895. Though a direct comparison with the settlement area in Census 2016 and the BUA area in Census 2022 cannot be drawn, the geographical areas of the Electoral Districts (EDs) of the town, Nenagh West Urban West and Nenagh East Urban have not changed in the inter-census period. The combined population of these EDs has increased from 8,656 in 2016 to 9,507 in 2022, a 9.8% increase in population. This increase in population exceeds both the state (8.1%) and county (5.2%) over the same period. Population growth in the town is driven by an increase in the density of the urban population, increasing from 1,018 persons per square km in 2016 to 1,118 in 2022, a 9.8% increase in density.<sup>25</sup>

Nenagh is identified as a “Key Town” in the Tipperary County Development Plan 2022-2028, a strategically located urban centre with accessibility and significant influence in sub-regional context, delivering social and transport infrastructure, employment and economic prosperity.<sup>26</sup>

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

- Recreational and development pressure on habitats and landscapes;
- Contribution towards increase in demand for waste water treatment at the municipal level;
- Contribution towards increase in demand for water supply and associated potential impact of water abstraction;

<sup>24</sup> Tipperary County Development Plan 2022-2028

<sup>25</sup> Nenagh Local Area Plan 2024-2030

<sup>26</sup> Tipperary County Development Plan 2022-2028

<sup>27</sup> The greatest health risk from radiation in Ireland is caused by radon. The presence of radon gas, a naturally occurring radioactive gas that originates from the decay of uranium in rocks and soils, occurs across the country. It

### 4.7.2 Human Health

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

Emission limits for discharges to air, soil and water are set with regards to internationally recognised exposure limit values. These are generally set to be many times the safe exposure limit - in order to provide protection. In the event that a plan or programme began to have adverse health effects on surrounding populations it is likely that it would have been identified as being in breach of such emission standards at a very early stage - and long before the manifestation of any adverse health effects in the population.

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

### 4.7.3 Existing Problems

The number of homes within the Plan area with radon levels above the reference level is within the normal range experienced in other locations across the country<sup>27</sup>.

Parts of the Plan area are vulnerable to adverse effects from changes in the occurrence of severe rainfall events and associated flooding

accounts for more than half of the total radiation dose received by the Irish population. As a known carcinogen, in the same category as tobacco smoke and asbestos it is a cause of lung cancer. Exposure to radon for long periods or at high concentrations can lead to lung cancer. Mapping available at <http://www.epa.ie/radiation/radonmap>

from surface water. Flooding in certain circumstances could pose a risk to human health. There is historic and predictive evidence of flooding within the Plan area (4.9.8).

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

## 4.8 Soil

Soil is the top layer of the earth's crust. It is formed by mineral particles, organic matter, water, air and living organisms. Soil can be considered as a non-renewable natural resource because it develops over very long timescales. It is an extremely complex, variable and living medium and performs many vital functions including: food and other biomass production, storage, filtration and transformation of many substances including water, carbon, and nitrogen. Soil has a role as a habitat and gene pool, serves as a platform for human activities, landscape and heritage and acts as a provider of raw materials. Such functions of soil are worthy of protection because of their socio-economic as well as environmental importance. Soils in any area are the result of the interaction of various factors, such as parent material, climate, vegetation and human action.

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

### 4.8.1 Soil Types

Main soil types<sup>28</sup> (shown on Figure 4.5) surrounding the built-up areas<sup>29</sup> of Nenagh are: surface water gleys (wetland soils with slowly permeable horizons resulting in seasonal waterlogging), partially within and to the east

<sup>28</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>29</sup> The built-up areas are mainly made up of urban soils. Urban soils are soils, which have been disturbed, transported or manipulated by human activity in the urban

of the Plan area; alluvial soils (associated with alluvial clay, silt or sand river deposits of the Rivers Nenagh and Ollatrim) stretching along the eastern parts of the Plan area; and luvisols (generally fertile, widely used for agriculture and associated with significant accumulation of clay) partially within the Plan area and the surrounding hinterland.

Other soils<sup>30</sup> underlying the Plan area may include brown earths (well-drained mineral soils, associated with high-levels of natural fertility), brown podzolics (dark brown humus-mineral soil covered with a thin mat of partly decayed leaves) and peat soils. Peat soils are often indicative of areas that are the most sensitive to development due to ecological sensitivities and impeded drainage issues.

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

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

### 4.8.2 County Geological Sites

Geological Survey Ireland coordinate the Irish Geological Heritage Programme, whereby an objective has been set to identify and select sites of geological interest within each county across the country. County Geological Sites (CGSs) do not receive statutory protection like Natural Heritage Areas but receive an effective protection from their inclusion in the planning system. The audit of CGSs in County Tipperary was completed in 2019, which identified 69 CGSs. There are no designated County Geological Sites occurring within the Plan area. The closest sites are Ardcroney Esker CGS (Site Code: TY002), located c. 3 km to the north-east of the Plan area and Carrigatogher M7 Road Cut CGS (Site Code: TY019), located c. 5 km to the south-west of the Plan area.

environment and are often overlain by a non-agricultural, man-made surface layer that has been produced by mixing, filling or by contamination of land surfaces in urban and suburban areas.

<sup>30</sup> The soil association concept represents a grouping of local soils that commonly occur together in the landscape (<http://gis.teagasc.ie/soils/soilguide.php>).



### 4.8.3 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 Uisce Éireann 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.

There are several groundwater drinking water abstractions with zones of contribution/source protection areas in vicinity of the Plan area to the south-east, namely: "Cunnahurt South Spring GWS"; "Cunnahurt North Spring GWA"; and Cunnahurt TW GWS.

### 4.8.4 Landslides

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

There are no landslide events recorded within the Plan area. The GSI have identified<sup>31</sup> the Plan area as having mainly low levels of landslide susceptibility (mapped on Figure 4.6).

### 4.8.5 Potentially Contaminated Lands and Landfill Sites

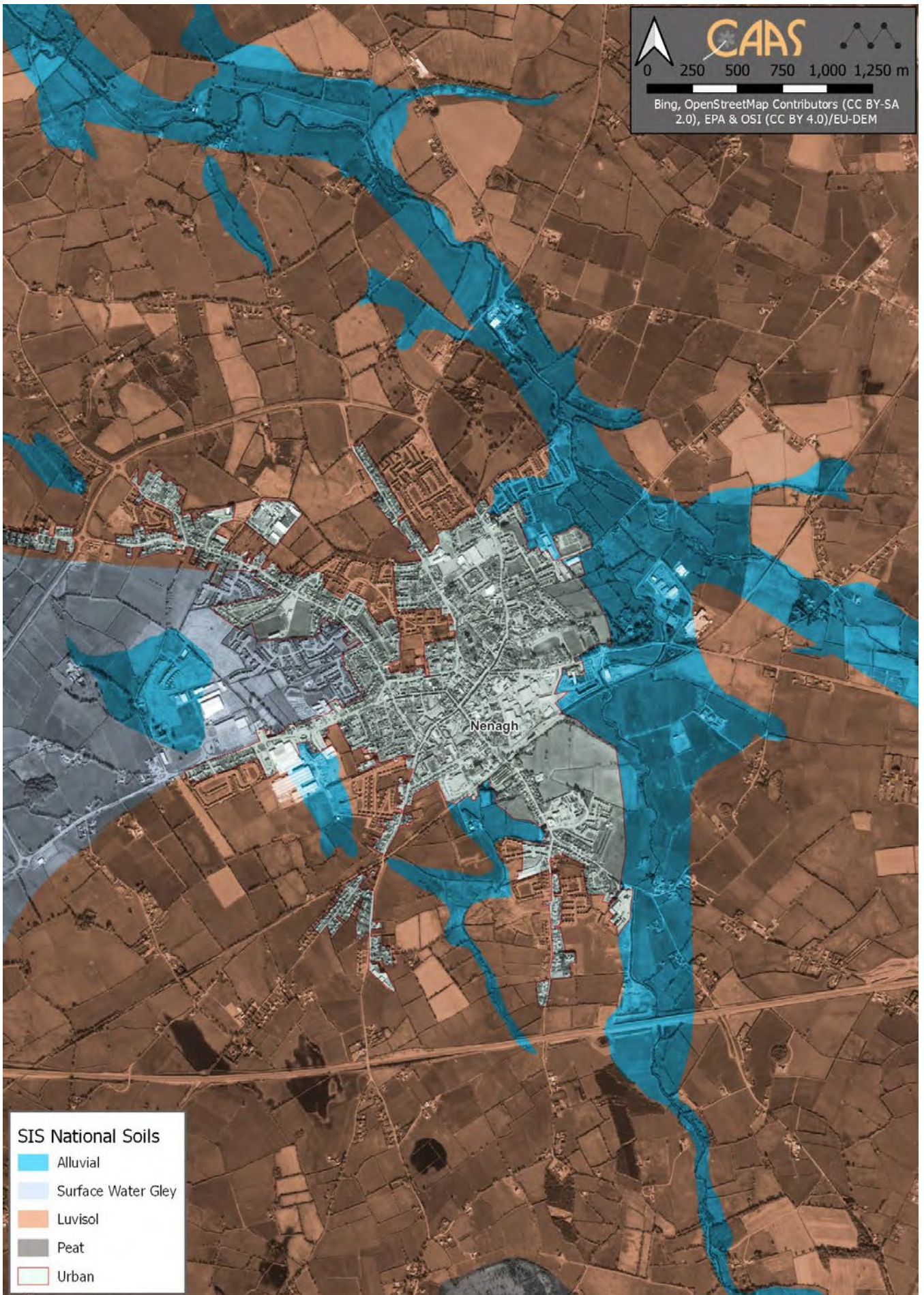
In the absence of mitigation, contaminated materials have the potential to adversely impact upon human health, water quality and habitats and species. As is the case with other urban and semi-urban areas across the country, there is potential for contamination at sites within the Plan area, especially where land uses occurred in the past, in the absence of environmental protection legislation.

### 4.8.6 Existing Problems

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

---

<sup>31</sup> <https://www.gsi.ie/en-ie/programmes-and-projects/geohazards/projects/Pages/Landslide-Susceptibility-Mapping.aspx>



**Figure 4.5 Soil types**

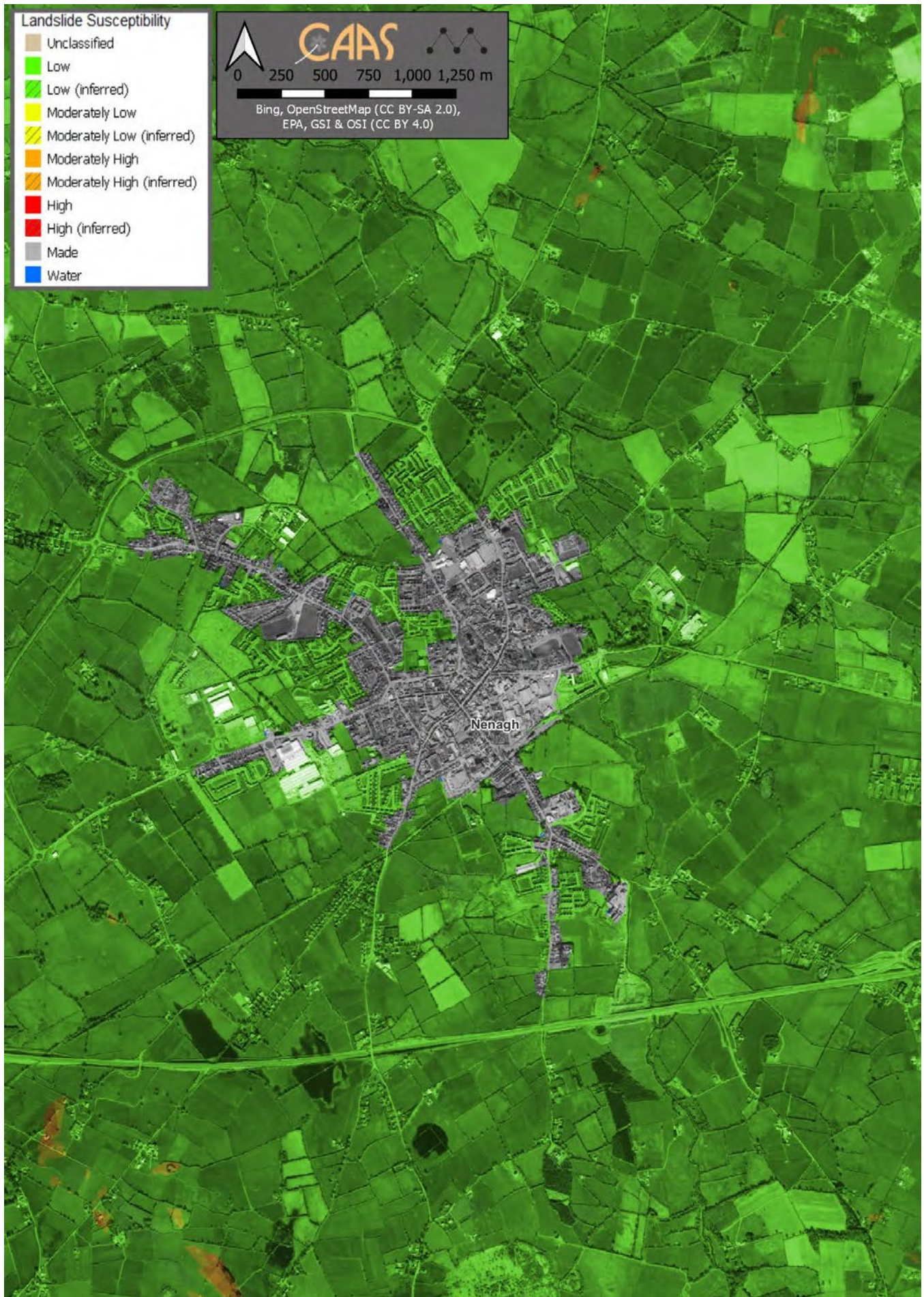


Figure 4.6 Landslide susceptibility

## 4.9 Water

### 4.9.1 The Water Framework Directive

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

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

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

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

### 4.9.2 Zone of Influence

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

### 4.9.3 Surface Water Drainage

A catchment is an area of land contributing to a waterbody, with all the water ultimately running off to a single outlet. The WFD requires

water quality management to be based on natural river catchments i.e. by reference to the natural, environmental unit rather than by reference to administrative or legal boundaries, which often fragment river catchments.

Surface water at and around Nenagh is channelled by several rivers and streams, forming part of the Lower Shannon River Catchment. The confluence of the Ollatrim and Nenagh rivers is located within the Plan boundary to the east of the Millers Brook estate. Smaller partly-culverted watercourses run through the town centre, into the Nenagh River and beyond into the Shannon water system at Dromineer. A number of other watercourses to the west of the Plan boundary drain into the Shannon at Youghalarra.

### 4.9.4 Surface Water Status

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

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

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

The current WFD (2016-2021) status<sup>32</sup> of various sections of the River Ollatrim, River Nenagh and Ardgregane Stream draining the Plan area is *moderate* (identified by the EPA as: 'Ollatrim\_050'; 'Nenagh\_050'; 'Nenagh\_060'; 'Nenagh\_070'; and 'Ardgregane Stream\_020') and sections of the Ardgregane Stream and Gortadalaun Stream (identified by the EPA as: 'Ardgregane Stream\_010' and 'Gortadalaun Stream\_10') is *poor*. Figure 4.7 illustrates the WFD surface water status within and surrounding the Plan area. The Ardgregane Stream, the River Nenagh and the River Ollatrim are currently identified in the combined 2016-2021 data as being at risk of not meeting the WFD's objectives due to the damage being caused by significant pressures related to<sup>33</sup>:

- **Agricultural pressures**, which may include issues related to farming including loss of excess nutrients and sediment loss to surface waters from diffuse sources such as spreading of fertilisers and manures. Excess phosphorous and sediment are typically issues for rivers and lakes, and too much nitrogen is the main issue for estuaries and coastal waters.
- **Urban run-off pressures**, which may 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.
- **Anthropogenic and hydromorphological pressures**, which are identified together in many instances. Hydromorphological pressures may 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 (channelisation), land drainage or hard infrastructure such as dams, weirs, culverts or other obstructions. Anthropogenic pressures may 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**, which may include discharges and emissions from industrial and commercial facilities.

#### 4.9.5 Groundwater Status

Groundwater is stored in the void spaces in underground layers of rock, or aquifers. These aquifers are permeable, allowing both the infiltration of water from the soils above them and the yielding of water to surface and coastal waters. Groundwater is the part of the subsurface water that is in the saturated zone-

the zone below the water table, the uppermost level of saturation in an aquifer at which the pressure is atmospheric, in which all pores and fissures are full of water.

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

The WFD status (2016-2021) of all groundwater underlying the Plan area (mapped on Figure 4.7) is currently identified as being of *good status*, meeting the objectives of the WFD.

#### 4.9.6 Aquifer Vulnerability and Productivity

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

Aquifer vulnerability refers to the ease with which pollutants of various kinds can enter into groundwater. The aquifers underlying most the Plan area are mapped on Figure 4.8 and classified as a mix of vulnerabilities:

- *High vulnerability* within central parts of the Plan area;
- *Extreme vulnerability and Extreme (Rock at or near surface or karst) vulnerability*, in parts of the west and south-east of the Plan area; and
- *Moderate vulnerability*, in parts of the south-east and north-east of the Plan area.

The GSI also rates aquifers based on the hydrogeological characteristics and on the value of the groundwater resource. This is referred to as aquifer productivity and is mapped on Figure 4.9. Aquifers in the vicinity of the Plan area are classified as being 'Locally Important Aquifer – bedrock which is moderately productive only in local zones' and 'Locally Important Aquifer – bedrock which is generally moderately productive'.

<sup>32</sup> As per EPA's WFD Status 2016-2021 classification (<https://gis.epa.ie/EPAMaps/>).

<sup>33</sup> <https://gis.epa.ie/EPAMaps/Water>

### 4.9.7 WFD Registers of Protected Areas

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

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

The groundwater underlying the Plan and surrounding areas are used for drinking water abstraction in accordance with European Communities (Drinking Water) (No. 2) Regulations 2007 (S.I. No. 278/2007) and are identified on the RPAs for Drinking Water Ground or Surface Water and RPAs for Groundwater in Nutrient Sensitive Areas<sup>34</sup> Bodies (mapped on Figure 4.10).

### 4.9.8 Flooding

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

Flood risk management and drainage provisions are already in force through the Tipperary County Development Plan 2022-2028 and related provisions have been integrated into the Plan. In addition, land use zoning within the Plan area has been informed by the SFRA

process and associated delineation of flood risk zones.

Historical flooding is documented by the Office of Public Works (including past flood events - see Figure 4.11). The most significant source of flood risk within the Plan area is from fluvial (from rivers and streams), however there are other sources of flooding present including pluvial (from rainwater) and risk from surface drainage systems.

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

### 4.9.9 Existing Problems

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

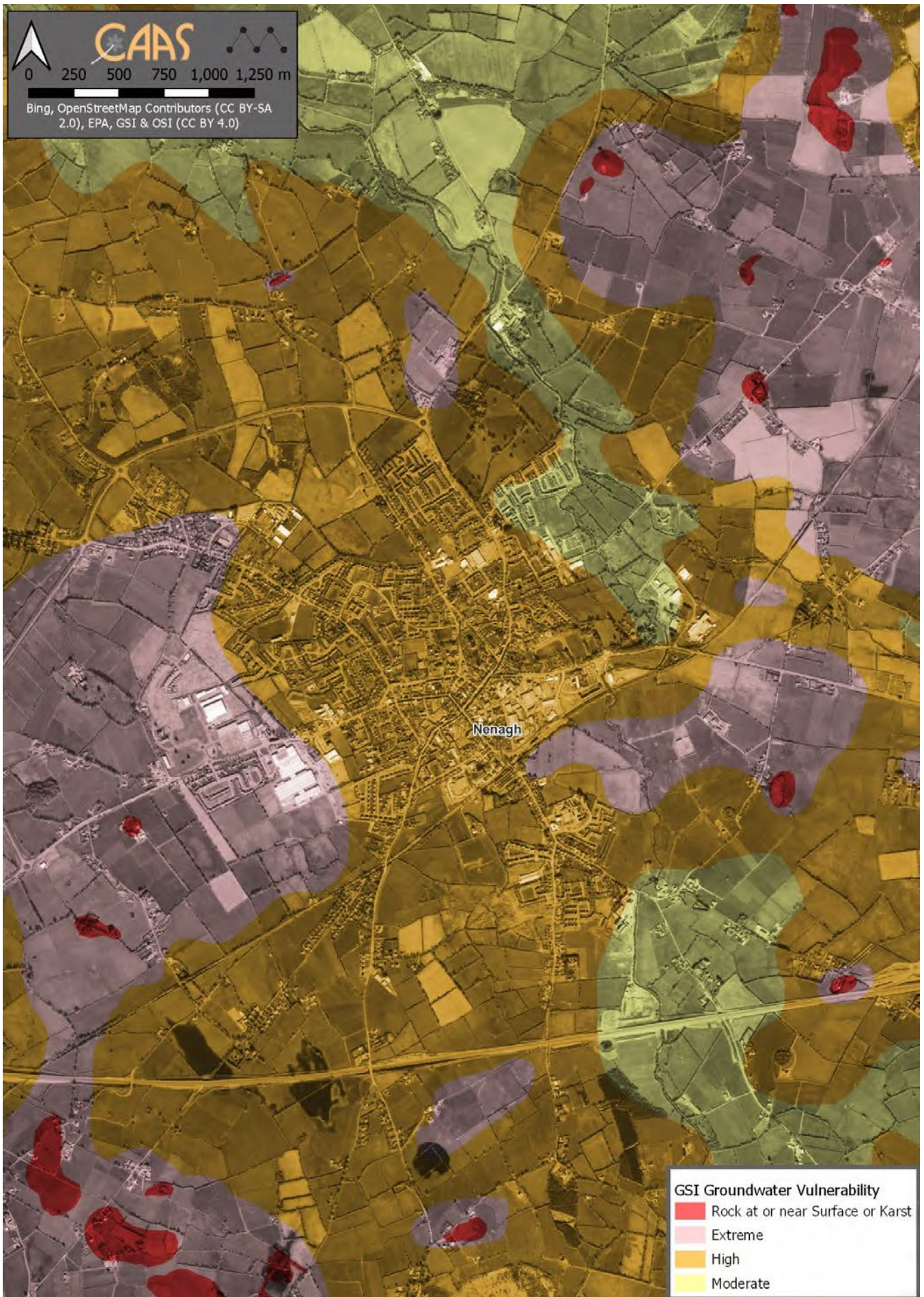
There is historic and predictive evidence of elevated levels of flood risk from fluvial sources at various locations across the Plan area. The preparation of the Plan, SEA and SFRA has taken place concurrently and the findings of the SFRA have informed both the Plan and the SEA.

---

<sup>34</sup> Groundwater bodies that intersect with areas designated as sensitive under the Urban Wastewater Treatment Directive (91/271/EEC) and transposing Regulations.



**Figure 4.7 WFD Surface Waterbodies and WFD Ground Waterbodies Status (2016-2021)**



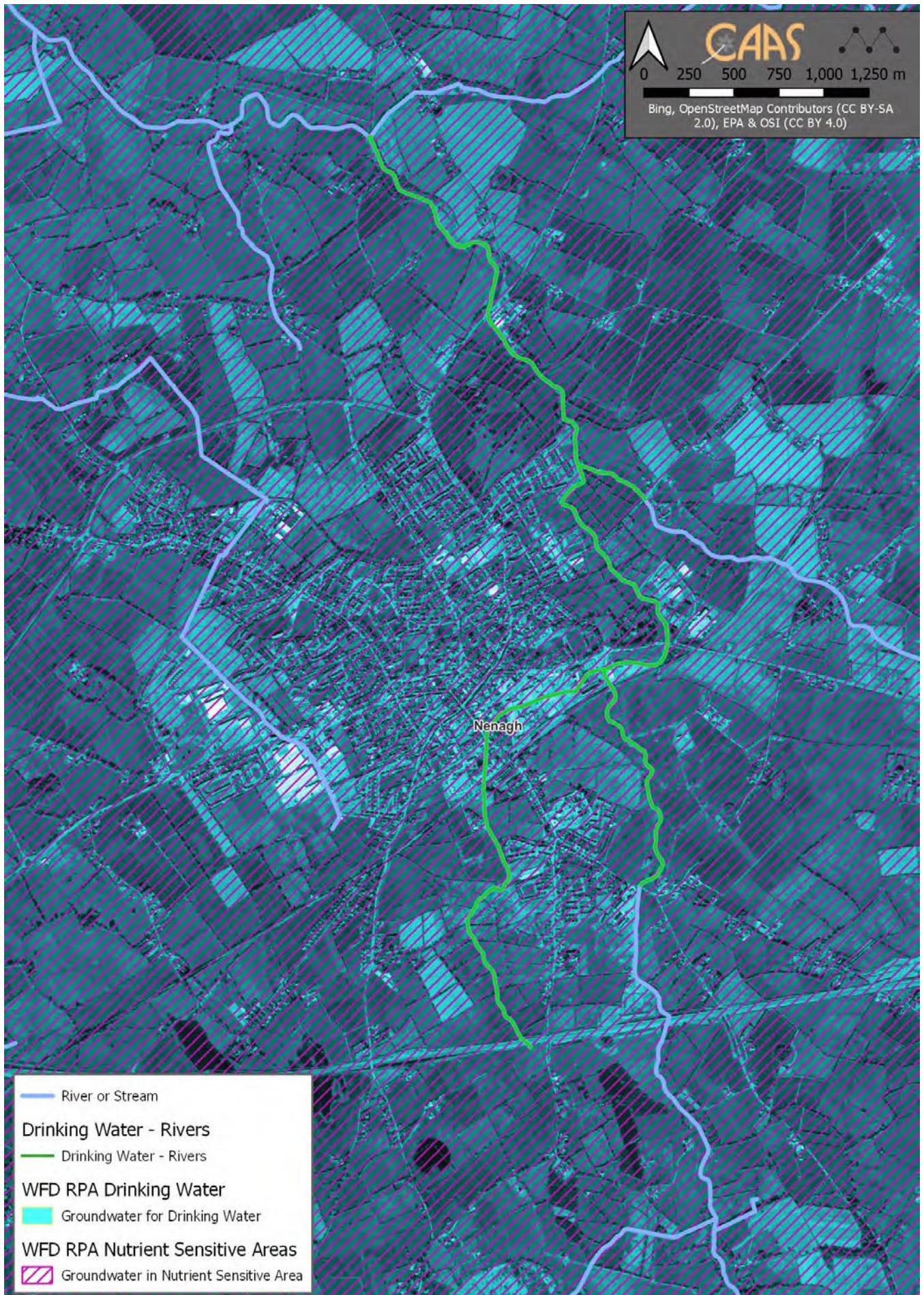
**Figure 4.8 Groundwater Vulnerability**

CAAS for Tipperary County Council





**Figure 4.9 Aquifer Productivity**  
CAAS for Tipperary County Council



**Figure 4.10 WFD RPA Drinking Water**

CAAS for Tipperary County Council



**Figure 4.11 OPW Past Flood Events**

## 4.10 Air and Climatic Factors

### 4.10.1 Climatic Factors

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

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

Ireland's Provisional Greenhouse Gas Emissions 1990-2020 (EPA, 2021) report details provisional estimates of greenhouse gas emissions for the period 1990-2020. In 2020 total national greenhouse gas emissions are estimated to have declined by 3.6% on 2019 levels to 57.70 million tonnes carbon dioxide equivalent (Mt CO<sub>2</sub>eq). This reduction in total emissions was driven by the COVID impact on transport and less peat used for electricity generation. It highlights that further, transformative measures will be needed to meet national climate ambitions.

Greenhouse gas emissions from the transport sector decreased by 15.7% or 1.92 Mt CO<sub>2</sub>eq in 2020. This decrease was largely driven by the impact of COVID restrictions on passenger car and public transport usage. International aviation, not included in the national total emissions, declined by 65% in 2020 or by 2.17 Mt CO<sub>2</sub> eq.

The EPA's 2023 publication *Ireland's Greenhouse Gas Emissions Projections 2022-2040* provides an updated assessment of Ireland's total projected greenhouse gas emissions to 2040, using the latest inventory data for 2021 as the starting point. 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>35</sup>. Key findings identified as part of the report are that:

- Ireland is not on track to meet the 51% emissions reduction target (by 2030 compared to 2018) based on these projections, which include most 2023 Climate Action Plan measures. Further measures still need to be identified and implemented to achieve this goal.
- The first two carbon budgets (2021-2030), which aim to support the achievement of the 51% emissions reduction goal, are projected to be exceeded by a significant margin of between 24% and 34%.
- Sectoral emissions ceilings for 2025 and 2030 are projected to be exceeded in almost all cases, including agriculture, electricity, industry, and transport.
- It is projected that Ireland can meet its original EU Effort Sharing Regulation target of a 30% emission reduction by 2030 (compared to 2005) if all measures and flexibilities are used. Reaching the new 42% EU emission reduction target will require full and rapid implementation of Climate Action Plan 2023 measures and further measures to be implemented.
- Emissions in the 'Additional Measures' scenario are projected to be 29% lower in 2030 (compared with 2018) whereas in the 'Existing Measures' scenario the emissions reduction is projected to be 11%. Faster implementation of measures will be required to meet both National and EU targets.
- Emissions from the energy industries sector are projected to decrease by between 50% and 60% over the period 2021 to 2030. Renewable energy generation is projected to range from 68% to over 80% of electricity generation as a result of projected further and rapid expansion in wind energy and other renewables.
- Manufacturing combustion emissions are projected to reduce by between 6% and 22% from 2021 to 2030 with the implementation of efficiency measures and renewable heat generation. However, industrial process emissions are projected to increase by 5% from 2021 to 2030 due to anticipated increased cement production.
- Total emissions from the agriculture sector are projected to decrease by between 4% and 20% over the period 2021 to 2030. Savings are projected from a variety of measures including switching to different fertilisers, limits on nitrogen fertiliser usage and bovine feed additives.
- Transport emissions are projected to decrease by 1% to 35% over the period 2021-2030. Measures that are projected to contribute to higher emissions reductions include 943,500 EVs by 2030, a 20 per cent biodiesel blend rate and a 20% reduction in total passenger vehicle kilometres.
- Emissions from the residential sector are projected to decrease by 36% to 47% between 2021 and 2030 with commercial and public services sector emissions projected to decrease by 19% to 49%. Measures projected to achieve this include 5.7 TWh of biomethane used for

<sup>35</sup> Regulation (EU) 2018/842 of on binding annual greenhouse gas emission reductions by Member States

from 2021 to 2030 contributing to climate action to meet commitments under the Paris Agreement.

heating, energy efficiency retrofits and the installation of up to 680,000 heat pumps in residential homes.

- Emissions from the land use, land use change and forestry sector are projected to increase over the period 2021 to 2030 as our forestry reaches harvesting age and changes from a carbon sink to a carbon source. Planned policies and measures for the sector, such as increased afforestation, water table management on agricultural organic soils and peatland rehabilitation, are projected to reduce the extent of the emissions increase.

## 4.10.2 Climate Mitigation and Adaptation

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

The National Climate Action Plan 2023 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 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 adaptation is a change in natural or human systems in response to the impacts of climate change. These changes moderate harm or exploit beneficial opportunities and can be in response to actual or expected impacts.

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

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

Climate change mitigation objectives are integral to the Plan, including, inter alia, compact growth and sustainable mobility, sustainable transport measures, town-centre first, nature-based solutions, and flood risk and water management.

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

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

Under the National Climate Action Plan 2023, Tipperary County Council is required to prepare a locally specific climate action plan for its administrative area. Once adopted, this plan will be valid for five years, and is subject to update at least every five years. The Tipperary County Council Climate Action Plan will be developed over the coming year and will contribute towards addressing the mitigation of greenhouse gas emissions, climate change adaptation, and strengthening the alignment between national climate policy and the delivery of local climate action. The Tipperary County Council Climate Action Plan must cover the following areas:

- An emphasis on a place-based approach to climate action, delivering a better understanding

of greenhouse gas emissions and climate-related risks at a local level;

- Context-specific conditions and locally-tailored policy making;
- Evidence-based and integrated climate action through adaptation and mitigation measures, centred around an understanding of the role of the Council in climate action; and
- Strategic direction at local and community levels on the delivery of the national climate objective.

### 4.10.3 Alternative Fuels and Renewable Electricity Generation Targets

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

The first Renewable Energy Directive (RED)<sup>36</sup> was the most important legislation influencing the growth of renewable energy in the EU and Ireland for the decade ending in 2020. From 2021, RED was replaced by the second Renewable Energy Directive (REDII)<sup>37</sup>, which continues to promote the growth of renewable energy out to 2030. RED set out two mandatory targets for renewable energy in Ireland to be met by 2020, while REDII sets new targets and criteria to be met by Ireland in 2030 and the interim.

The overall renewable energy share is referred to as the overall RES target. REDII introduced a binding EU-wide target for overall RES of 32% in 2030 and requires Member States to set their national contributions to the EU-wide target. As per the National Energy and Climate Plan (NECP) 2021-2030, Ireland's overall RES target is 34.1% in 2030. The sectoral targets are referred to as RES-E (electricity), RES-T (transport) and RES-H (heat). Ireland's NECP 2021-2030 set targets for RES-E of 70%, RES-H of 24% and RES-T of 14%, by 2030.<sup>38</sup>

### 4.10.4 Energy Security

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

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

### 4.10.5 Ambient Air Quality

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

<sup>36</sup> Directive 2009/28/EC on the promotion of the use of energy from renewable sources.

<sup>37</sup> Directive (EU) 2018/2001 on the promotion of the use of energy from renewable resources (recast).

<sup>38</sup> SEAI (2022): *Energy in Ireland 2022 Report*. Available at: <https://www.seai.ie/publications/Energy-in-Ireland-2022.pdf>

The EPA's (2022) *Air Quality in Ireland 2021 Report* 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>2.5</sub>).

Air pollution from transport is dominated by NO<sub>2</sub> emissions. Of these, NO<sub>2</sub> is particularly impactful from a health perspective. The report describes that concentrations of NO<sub>2</sub> at urban areas in Ireland are close to the EU annual limit value. The potential implications for air quality with increases in traffic numbers or from certain weather conditions unfavourable to dispersion of pollutants could result in exceedances of the EU limit value.

With regards to solutions, the report identifies that:

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

In order to apply with European Directives relating to air quality, the EPA manages the National Ambient Air Quality Network and measures the levels of a number of atmospheric pollutants at locations across the country.<sup>39</sup>

#### 4.10.6 Noise

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

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

In compliance with the Directive and transposing Environmental Noise Regulations (S.I. No. 140 of 2006), Noise Action Plans have been prepared for each local authority area within the country, including for Tipperary County Council. 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.

#### 4.10.7 Existing Problems

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

Air quality and noise present challenges, especially in urban areas, as detailed under the relevant sub-sections above. With regard to air quality, air pollution from transport is dominated by NO<sub>x</sub> emissions. Of these, NO<sub>2</sub> is particularly impactful from a health perspective. The Plan will help to facilitate reductions in emissions and a transition from dependence on fossil fuel combustion powered transport.

#### 4.11 Material Assets

Other material assets, in addition to those detailed below, covered by the SEA include archaeological and architectural heritage (see

<sup>39</sup> For more detail on current daily air quality data for the Plan refer to: <https://gis.epa.ie/EPAMaps/>.

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: 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.); and natural resources that are covered under other topics such as water and soil.

#### **4.11.2 Land**

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

#### **4.11.3 Green Infrastructure**

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

#### **4.11.4 Forestry**

Some parts of the Plan area are covered by forestry. Woodlands provide recreational opportunities in addition to their heritage and economic benefits. They are a valuable resource in terms of biodiversity, recreation and tourism, and also important as links in the green infrastructure network (see Section 4.6.6).

#### **4.11.5 Transport**

Nenagh is strategically located near several well served transport links, including the M7, which bypasses the town and provides links to

Limerick, Dublin and the rest of the Country. The N52 also bypasses the town, and provides access to Birr, Athlone and Tullamore. Nenagh is served by Irish Rail, with routes to Limerick, Dublin, Portlaoise and Kildare. National, regional and local roads provide vital links between the town and retail, service and employment centres throughout the County and to adjoining counties.

Bus services are provided in the town by Bus Éireann and private operators. Nenagh has inter-urban links with Limerick, Dublin and Athlone, as well as more local services to surrounding towns and villages, as well as Thurles, Roscrea, Templemore and Birr.

Nenagh is located on the main rail line (Ballybrophy to Limerick) with a rail station within walking distance of the town centre, at the south of Kenyon Street. However, train services are poor with limited services, and requiring connections to Dublin and Cork. The poor quality of services is highlighted by the very small mode share that train services provides, just 0.12% of the total mode share. The need for infrastructural improvements to the rail line to increase the commuter rail service on the Nenagh to Limerick line is recognised with the Southern RSES.

Nenagh has a relatively high reliance on the motor vehicle, though walking trips exceed the national average. A Local Transport Plan (LTP) has been integrated into the Plan to help ensure a shift towards more sustainable modes of transport.

#### **4.11.6 Minerals and Aggregates**

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

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

#### **4.11.7 Water Services**

##### **4.11.7.1 Wastewater**

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



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

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

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

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

Uisce Éireann, working in partnership with Tipperary Council, is making investments to undertake essential upgrade works to waste water treatment plants in towns and villages across the County. The upgrading of infrastructure will contribute towards compliance with the Water Framework Directive, EU Urban Waste Water Treatment Directive and Drinking Water Regulations and

will help to protect human health and maintain the quality of surface and ground waters.

#### 4.11.7.2 Wastewater Infrastructure

The Wastewater Treatment Plant (WWTP) serving Nenagh is currently not listed as a priority area (such areas are those where improvements are required to resolve urgent environmental issues).<sup>40</sup>

The Plan area is served by the Nenagh WWTP (Registration No. D0027-01), which has a design capacity of 12,000 Population Equivalent (PE).

The Nenagh WWTP is currently fully compliant with the Emission Limit Values (ELVs) set in the Wastewater Discharge Licence in the most recent available Annual Environmental Report 2022 (published in April 2023).<sup>41</sup>

A planned upgrade of the Nenagh Wastewater Treatment Plant Nenagh is currently underway by Uisce Éireann to increase the capacity of the plant. An application for planning permission for the upgrade works is due to be submitted in the first half of 2024. Project delivery timeframes for the project will be available when the investment planning process, which is currently underway for the next Capital Investment Plan (2025-2029), has concluded. Project timelines are subject to planning approvals and statutory consents being obtained. The upgraded plant will have sufficient capacity to cater for the projected growth to 2030 and beyond. In the interim, while the planned upgrade project is progressing, the existing WWTP has available capacity for 927 population equivalent<sup>42</sup>. Developers will be expected to engage with Uisce Éireann in developing proposals and the provision of a Connection Agreement with Uisce Éireann shall be a condition to the grant of planning permission for new developments prior to commencement of development. Ongoing improvement works are required in the town to ensure adequate separation of foul and surface water, and to service of lands identified for development over the lifetime of the Plan. Local network upgrades may be required some areas to provide capacity to individual sites.<sup>43</sup>

<sup>40</sup> <https://www.epa.ie/publications/compliance--enforcement/waste-water/priority-areas-list-current.php>

<sup>41</sup> [https://www.water.ie/docs/aers/2022/D0027-01\\_2022\\_AER.pdf](https://www.water.ie/docs/aers/2022/D0027-01_2022_AER.pdf)

<sup>42</sup> Uisce Éireann maintain a capacity register for all waste water treatment system and water supply systems which

are updated periodically and can be viewed at [www.water.ie/connections/developer-services/capacity-registers/](http://www.water.ie/connections/developer-services/capacity-registers/)

<sup>43</sup> Nenagh Local Area Plan 2024-2030

As per Section 8 of the Plan, 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.

#### 4.11.7.3 Water Supply

Uisce Éireann is responsible for providing and maintaining adequate public water supply infrastructure throughout the county.

Nenagh is located within the Nenagh (WRZ)<sup>44</sup> and currently served by the Nenagh Regional Public Water Supply (PWS). This PWS serves a population of 14,483 and produces 6,488 m<sup>3</sup>/day. Raw water is abstracted from Lough Derg and undergoes treatment at the Coolbawn Water Treatment Plant.<sup>45</sup> As identified by Uisce Éireann, there is capacity available to meet projected population growth up to 2031, although an improvement to the level of service is required.<sup>46</sup>

Under Section 58 of the Environmental Protection Agency 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 that are supported by Remedial Action Lists (RALs). The RAL identifies water supplies that are not in compliance with the Regulations mentioned above. The Nenagh Regional Water Supply, serving the Plan area, was included on the most recent EPA Remedial Action List (Q4 of 2022, published in February 2023)<sup>47</sup> due to elevated levels of trihalomethanes above the standard in the Drinking Water Regulations.

#### 4.11.7.4 Surface Water Drainage

Tipperary County Council is responsible for surface water drainage in the Plan area. Sustainable urban Drainage systems (SuDS) is a method to minimise the quantity and increase

the quality of surface water runoff and to mitigate adverse impacts of climate change. SuDS can also provide amenity and biodiversity benefits. The Council seeks to ensure the sustainable management of surface water discharges in urban areas through the use of SuDS.

### 4.11.8 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 County Council.

There are three Region Waste Management Plans in Ireland and these will be replaced by a new National Waste Management Plan for a Circular Economy, which will take account of the various measures outlined in A Waste Action Plan for A Circular Economy - Ireland's National Waste Policy 2020-2025.

### 4.11.9 Existing Problems

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

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

## 4.12 Cultural Heritage

### 4.12.1 Archaeological Heritage

Archaeology is the study of past societies through the material remains left by those societies and the evidence of their environment. Archaeological sites and monuments vary greatly in form and date; examples include earthworks of different types and periods, (e.g.

These proposals will be developed and prioritised through the National Water Resources Plan and investment planning process. Available:

<https://www.water.ie/connections/developer-services/capacity-registers/water-supply-capacity-register/tipperary/> (published in June 2023).

<sup>47</sup> <https://www.epa.ie/publications/compliance-enforcement/drinking-water/annual-drinking-water-reports/epa-drinking-water-remedial-action-list-q4-of-2022.php>

<sup>44</sup> A Water Resource Zone (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>45</sup> Nenagh Local Area Plan 2024-2030

<sup>46</sup> Capacity Available to meet 2032 population targets - Level of service (LoS) improvement required. Leakage reduction and/or capital investment will be required to maintain/improve levels of service as demand increases.

early historic ringforts and prehistoric burial mounds), megalithic tombs from the Prehistoric period, medieval buildings, urban archaeological deposits and underwater features.

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

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

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

Figure 4.12 (for more information, please refer to [www.archaeology.ie](http://www.archaeology.ie)) shows the spatial distribution of recorded monuments within the

Plan area, including sites and monuments found within the town's Zones of Archaeological Potential. There are various entries to the RMP within the Plan area (mapped on Figure 4.12), including: Nenagh Castle; Franciscan Abbey; Nenagh Church (at graveyard); and Nenagh Gaol.

Nenagh is a historic town, designated as one of six "Walled Towns" in County Tipperary. Town defences are considered to be monuments for the purposes of the National Monuments Acts 1930-2004. The Nenagh Castle is also identified as a National Monument in State Care (Guardianship).

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

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

#### **4.12.2 Architectural Heritage**

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

archaeological, artistic, cultural, scientific, social, or technical interest.

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

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

- The interior of the structure;
- The land lying within the curtilage<sup>48</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).

Similar to the general spatial spread of archaeological heritage, clusters of architectural heritage are indicated within the town's centre, as shown on Figure 4.13.

Protected Structures within the Plan area include<sup>49</sup>: Nenagh Castle Complex (including the castle filed and gardens); Nenagh Courthouse; Riverston House; St. Mary's of the Rosary Church; and Nenagh Railway Station.

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. The historic core of Nenagh (including Summerhill, Pearse Street, Kenyon Street, and Kickham Street/Banba Square) is designated as an Architectural Conservation Area (shown on Figure 4.13).

---

<sup>48</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

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. Figure 4.13 shows entries to NIAH in the Plan area.

### 4.12.3 Existing Problems

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

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.

<sup>49</sup> Nenagh Town & Environs Development Plan 2013-2019 Record of Protected Structures. A review of the RPS for Nenagh will be carried out in accordance with Section 55 of the Act and thereafter the TCDP, Volume 4, will set out an RPS for Nenagh including provisions and objectives for their protection.



**Figure 4.12 Archaeological Heritage**



**Figure 4.13 Architectural Heritage**

## 4.13 Landscape

### 4.13.1 Introduction

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

Nenagh is the largest town in North Tipperary, and lies within the heartlands of the mid-west region of Ireland. The town is located approximately 35 km to the north-east of Limerick City, 12 km to the east of Lough Derg and the River Shannon and 10 km to the north of the Silvermine Mountain range. Nenagh is well known nationally as a market town and provides services to the agricultural hinterland.

The topography of Nenagh is predominantly flat with a gentle slope up Summerhill in the north of the town. The land surrounding the Plan area is predominantly made up of agricultural and pasture land and an area of woodland to the north-west. The Nenagh River flows from the south to the north to the east of the Plan area towards Lough Derg.

### 4.13.2 Landscape Character Assessment

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

There are a range of different landscapes found in the Plan area, each with varying visual and amenity values, topography, exposure levels and each containing a variety of habitats. Each landscape type has varying capacity to absorb development related to its overall sensitivity.

The existing Tipperary County Development Plan 2022-2028 identifies four Universal Landscape Archetypes, which is subdivided into seven Landscape Character Types and 23 Landscape Character Areas, 63 Scenic Routes and Views and Primary and Secondary Amenity Areas within the council's administrative area.

The Landscape Character Areas in County Tipperary are also classified according to their level of sensitivity, ranging from: 'Vulnerable'; 'Transitional Vulnerability'; 'Sensitive'; 'Transitional Sensitivity'; 'Normal'; and 'Robust'.

The Plan area is located within the 'Urban & Fringe Areas – Nenagh Environs' ('Robust' identified as the dominant sensitivity level), 'Nenagh Corridor' ('Normal' identified as the dominant sensitivity level) and 'Borrisokane Lowlands' ('Transitional Sensitivity' identified as the dominant sensitivity level) Landscape Character Area, as shown on Figure 4.14.

The Plan also recognises 'Respecting Views/Streetscapes/Landscapes' that are particularly important and should be given due consideration as part of the design process for new development.

### 4.13.3 Existing Environmental Problems

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



**Figure 4.14 Landscape Character Areas**



## **Section 5 Strategic Environmental Objectives**

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

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

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

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

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

Given the position of the Local Area Plan in the land use planning hierarchy beneath the Tipperary County Development Plan 2022-2028, the measures identified in that County Development Plan SEA have been used as they are or having been slightly modified. 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**

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives	Indicators	Targets
<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 County's 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 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>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 County'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 fauna – from County Development Plan and Local Area Plan</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 – from County Development Plan and Local Area Plan</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 the County's 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 County Development Plan and Local Area Plan</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 County Development Plan and Local Area Plan</li> <li>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>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 previous 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 previous CSO figures</li> </ul>
				<ul style="list-style-type: none"> <li>Number of spatial plans 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>

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives	Indicators	Targets
<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 and infill land parcels across the Plan area's existing built-up footprint</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 proposed regional and 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 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</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</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> </ul>	<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> </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> <li>• See also targets relating to greenfield and brownfield development of land under Soil and broadband under Population and Human Health</li> </ul>

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives	Indicators	Targets
			<ul style="list-style-type: none"> <li>Reduce the energy demand from the transport sector and support moves to electrification of road and rail transport modes</li> <li>Encourage the transition to a zero-carbon economy by facilitating the development of a grid infrastructure to support renewables and international connectivity. Reduce the average energy consumption per capita including promoting energy efficient buildings, retrofitting, smart- buildings, towns and grids</li> </ul>	<ul style="list-style-type: none"> <li>Proportion of people reporting regular cycling / walking to school and work above previous 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 previous 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 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 previous National Travel Survey levels</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 previous 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>50</sup>	<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 County'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>	<ul style="list-style-type: none"> <li>Implementation of County Development Plan and Local Area Plan measures relating to climate reduction targets</li> </ul>	<ul style="list-style-type: none"> <li>For review of progress on implementing County Development Plan and Local Area Plan objectives to demonstrate successful implementation of measures relating to climate reduction targets, including renewable energy production</li> </ul>
				<ul style="list-style-type: none"> <li>A competitive, low-carbon, climate-resilient and environmentally sustainable economy</li> </ul>	<ul style="list-style-type: none"> <li>Contribute towards transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050</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>	

<sup>50</sup> Please also refer to relevant legislation and requirements under Section 4.10, Section 8.7 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.

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives	Indicators	Targets
				<ul style="list-style-type: none"> <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 previous levels</li> <li>Proportion of people reporting regular cycling / walking to school and work above previous CSO figures</li> </ul>	<ul style="list-style-type: none"> <li>Contribute towards the reduction targets of carbon dioxide (CO<sub>2</sub>) emissions 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 County using private fossil fuel-based car compared to previous levels</li> <li>Increase in the proportion of people reporting regular cycling / walking to school and work above previous 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 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> </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 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. Alternatives for the Plan are identified under a number of types below and assessed in Section 7.

### 6.2 Limitations in Available Alternatives

The Plan is required to be prepared by the Planning and Development Act 2000 (as amended), which specifies various types of objectives that must be provided for by the Plan.

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

### 6.3 Description of Alternatives Considered

#### 6.3.1 Type 1 Alternatives: 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, or proposed to be linked via LTP active travel measures, 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 National Planning Framework, 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, or proposed to be linked via LTP active travel measures, 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.

### 6.3.2 Type 2 Alternatives: Infrastructure and Environmental Approach

Three pillars in terms of an overall infrastructure and environmental approach to preparing the Plan are set out as follows:

1. An Infrastructural Capacity-led approach would primarily use Serviced Land and Infrastructure Assessment to provide an evidence base to inform future development to be provided for by the Plan. 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. Relevant sites are identified that could contribute towards the population growth to be provided for. They are 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).
2. An Ecosystems-Services<sup>51</sup> Approach supporting the integrated management of land, water and living resources that promotes conservation Nature-Based Solutions and sustainable landuse.
3. Support for a move to a low-carbon and climate resilient economy and society incorporating stronger responses in how the population of the town lives, travels and works to contribute towards the achievement of low-carbon objectives is.

Having considered the above, two alternative approaches to the infrastructure and environmental approach of the Plan are considered:

- **Type 2 Alternative A:** A Plan that deeply embeds the principles of infrastructural capacity, ecosystems services and strong support for a low-carbon and climate resilient economy and society.
- **Type 2 Alternative B**  
A Plan that supports to a lesser degree, infrastructural capacity assessment in terms of land development, and the integration of ecosystems services and climate action led approaches to spatial planning.

### 6.3.3 Type 3 Alternatives: Area Based Transport Assessment Alternatives

In line with the objectives of the County Development Plan, the creation of a compact and connected Nenagh could be achieved by integrating land use and transportation policy, thus promoting compact climate resilient growth and ensuring that people can easily access their homes, employment, education and the services they require by walking cycling or use of public transport. An Area Based Transport Assessment, the findings of which would be provided in a Local Transport Plan, would seek to maximise opportunities for the integration of land use and transport planning, with an emphasis on cycling, walking and public transport.

- **Type 3 Alternative A:** Inform the Plan with an Area Based Transport Assessment, which focuses on delivering travel solutions that support moving people from the private car to more sustainable modes.
- **Type 3 Alternative B:** Do not inform the Plan with an Area Based Transport Assessment, which focuses on delivering travel solutions that support moving people from the private car to more sustainable modes, relying solely on existing provisions, including those included as part of the County Development Plan. The Development Plan policy objectives are also focused on the Avoid-Shift-Improve approach, but specific interventions for Nenagh are not set out in detail.

---

<sup>51</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.

### **6.3.4 Type 4 Alternatives: Transport Infrastructure Alternatives**

In integrating provisions relating to the provision of transport infrastructure into the Plan, the following alternatives were considered:

- **Type 4 Alternative A:** Provide new transport infrastructure, subject to environmental constraints, including those related to habitats and potential impacts such as disturbance from lighting – includes minimising river crossings, avoiding sensitive habitats, not increasing barriers to flood waters and sustainable design and construction techniques.
- **Type 4 Alternative B:** Provide new transport infrastructure with all additional environmental mitigation left to be defined until project level.



## Section 7 Evaluation of Alternatives

### 7.1 Introduction

This section provides a comparative evaluation of the likely significant environmental effects<sup>52</sup> of implementing available alternatives that are described in Section 6. This determination sought to understand whether each alternative was likely to improve conflict with or have a neutral interaction with the receiving environment.

### 7.2 Methodology

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

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

The interactions identified are reflective of likely significant environmental effects:

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

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

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

**Table 7.1 Strategic Environmental Objectives<sup>53</sup>**

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives
Biodiversity, Flora and Fauna	BFF	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 County's natural capital</li> </ul>

<sup>52</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>53</sup> See also Section 5

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives
<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 the County'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 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 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 SuDS, porous surfacing and green roofs) into development proposals</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</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 move to electrification of road and rail transport modes</li> <li>Encourage the transition to a zero-carbon economy by facilitating the development of a grid infrastructure to support renewables and international connectivity. Reduce the average energy consumption per capita including promoting energy efficient buildings, retrofitting, smart- buildings, 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 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 County'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>

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives
<b>Cultural Heritage</b>	<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>
<b>Landscape</b>	<b>L</b>	Protect and enhance the landscape character	<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>

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

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

## 7.3 Detailed Assessment of Alternatives

### 7.3.1 Effects Common to all Alternatives

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

**Table 7.3 Effects Common to All Alternatives**

<b>Environmental Component</b>	<b>Significant Positive Effect, likely to occur</b>	<b>Potentially Significant Adverse Environmental Effects, if unmitigated</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 Plan area's existing built-up footprint) 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 County and beyond.</li> <li>• Sustains existing sustainable rural management practices – and the communities who support them – to ensure the continuation of long-established managed landscapes and the flora and fauna that they contain.</li> </ul>	<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 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 (including those within and adjacent to the Plan area's existing built-up footprint) 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 County and beyond</li> <li>• Contribution towards the protection of human health by facilitating development of lands (including those within and adjacent to the Plan area's existing built-up footprint) 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 County 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> </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 (including those within and adjacent to the Plan area's existing built-up footprint) 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 County 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> </ul>
<b>Water</b>	<ul style="list-style-type: none"> <li>• Contribution towards the protection of water by facilitating development of lands (including those within and adjacent to the Plan area's existing built-up footprint) 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 County 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 (including those within and adjacent to the Plan area's existing built-up footprint) 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 County 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 (including those within and adjacent to the Plan area's existing built-up footprint) 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 County and beyond.</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>
<b>Cultural Heritage</b>	<ul style="list-style-type: none"> <li>• Contributes towards protection of cultural heritage elsewhere in the County 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 Type 1 Alternatives: Town Centre First Approach

Alternative A would 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 north and south of the town.

Alternative B 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 a plan-led approach to the development of neighbourhoods and 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. This alternative would strengthen the town centre and reduce pressure for expansion into greenfield out of town sites, whilst at the same time ensuring that projected growth can be delivered.

Type 1 alternatives are assessed against Strategic Environmental Objectives on Table 7.4.

Selected Type 1 Alternative for the Plan: Alternative B.

**Table 7.4 Assessment of Type 1 Alternatives against SEOs**

Alternative (selected alternative indicated in <b>bold</b> )	Likely to <b>Improve</b> status of SEOs		Potential <b>Conflict</b> with status of SEOs - likely to be mitigated		Probable <b>Conflict</b> with status of SEOs - unlikely to be mitigated	<b>No Likely</b> interaction with status of SEOs
	to a <b>Greater</b> degree	to a <b>Lesser</b> degree	to a <b>Lesser</b> degree	to a <b>Greater</b> degree	<b>-</b>	<b>0</b>
Alternative A: Strongly embody the principle of town centre first and compact development	<b>PHH A C MA BFF S W CH L</b> As a result of development within the Town Centre	<b>PHH A C MA BFF SW CH L</b> As a result of development beyond the Town Centre within the Plan area	<b>PHH A C MA BFF SW CH L</b> As a result of development within the Plan area	<b>PHH A C MA BFF S W CH L</b> As a result of development greenfield sites beyond the Plan area		
<b>Alternative B: Embody and support the principles of Town Centre First and compact development, and specify 'neighbourhoods' with unique characteristics and development criteria</b>	<b>PHH A C MA BFF S W CH L</b> As a result of development beyond the Town Centre within the Plan area	<b>PHH A C MA BFF SW CH L</b> As a result of development within the Town Centre	<b>PHH A C MA BFF SW CH L</b> As a result of development greenfield sites beyond the Plan area	<b>PHH A C MA BFF S W CH L</b> As a result of development within the Plan area		

### 7.3.3 Type 2 Alternatives: Infrastructure and Environmental Approach

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. Alternative A would fully support achieving the objectives of the NPF and RSES. An infrastructure led approach would provide a strategy for sustainable compact growth across the Plan area, contribute to carbon reduction targets and achieve environmental enhancement and economic growth.

Alternative A would ensure that the sustainable development of the town 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.

A Plan that deeply embeds the principles of infrastructural capacity, ecosystems services and strong support for a move to a low-carbon and climate resilient economy and society would provide for the:

- Support of compact development that enables active travel and efficient use of services and infrastructure as the most sustainable and low-carbon form of settlement in line with the provisions of the Climate Action Plan.
- Consideration of and protection of the role of natural systems and consideration of the services that ecosystems provide - including those that underpin social and economic well-being, such as flood and climate regulation or recreation, culture and quality of life
- Involvement and empowerment of people and communities - in decision making and in an active move to a low-carbon society.

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 (renewable and non-renewable resources, e.g. plants, animals, air, water, soils, minerals) 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;
- A decreased likelihood in the extent, magnitude and frequency of adverse effects on natural capital and ecosystem services; and
- Active support for the provisions of the National Climate Action Plan and national targets for GHG emissions.

Alternative B considers existing and future demand and capacity in infrastructure, but the allocation of growth and associated climate action policy responses are looser than under Alternative A. Decisions relating to infrastructure assessment are left to project level wherever this is possible. Climate action is supported, but not to the same degree as under Alternative A.

Alternative B would benefit the efficient provision of infrastructure, climate action and the environment (including water, human health, ecology and air/climate) the least and would provide reduced levels of certainty and coherence to both decision makers and stakeholders, including residents and potential developers. Applications for developments would be less likely to be successful, and residual adverse effects would be more likely. Taking a less supportive infrastructure led approach would not contribute towards achieving policy objectives of the RSES or NPF to the same degree as Alternative A.

Under Alternative B, many natural capital and ecosystem service issues would be integrated into individual Plan Policy Objectives and into decision making at lower tiers of plan preparation and development management. However, this approach would be less coordinated and comprehensive than would be the case under Alternative A. This would mean that there would be:

- A decreased likelihood in the extent, magnitude and frequency of positive effects occurring with regard to natural capital and ecosystem service issues;
- An increased likelihood in the extent, magnitude and frequency of adverse effects on natural capital and ecosystem services; and
- A decreased likelihood of compliance with the provisions of the National Climate Action Plan and national targets for GHG emissions.

Type 2 alternatives are assessed against Strategic Environmental Objectives on Table 7.5.

Selected Type 2 Alternative for the Plan: Alternative A.

**Table 7.5 Assessment of Type 2 Alternatives against SEOs**

Alternative (selected alternative indicated in <b>bold</b> )	Likely to <b>Improve</b> status of SEOs		Potential <b>Conflict</b> with status of SEOs - likely to be mitigated		Probable <b>Conflict</b> with status of SEOs - unlikely to be mitigated	<b>No Likely</b> interaction with status of SEOs
	+	-	-	+	-	0
	to a <b>Greater</b> degree	to a <b>Lesser</b> degree	to a <b>Lesser</b> degree	to a <b>Greater</b> degree		
<b>Alternative A: Supports infrastructure and environmental approach to a greater degree</b>	<b>PHH A C MA BFF S W CH L</b>		<b>PHH A MA C BFF S W CH L</b>			
Alternative B: Supports infrastructure and environmental approach to a lesser degree		<b>PHH A MA C BFF S W CH L</b>		<b>PHH A C MA BFF S W CH L</b>		



### 7.3.4 Type 3 Alternatives: Area Based Transport Assessment Alternatives

Informing the Plan with an Area Based Transport Assessment, which focuses on delivering travel solutions that support moving people from the private car to more sustainable modes, (**Area Based Transport Assessment Alternative A**) would provide a more coordinated and more orderly provision of transport infrastructure and services, with delivery of projects, and associated benefit with respect to sustainable mobility and compact development, more likely. This approach would be more likely to improve the potential for meeting important objectives relating to emissions and energy use. Potentially adverse impacts arising from more coherently planned transport developments on environmental components, including ecology and water, could be mitigated at both LAP and project level.

Not informing the Plan with an Area Based Transport Assessment, which focuses on delivering travel solutions that support moving people from the private car to more sustainable modes, (**Area Based Transport Assessment Alternative B**) would provide a less coordinated and less orderly provision of transport infrastructure and services, with delivery of projects, and associated benefit with respect to sustainable mobility and compact development, less likely. This approach would be less likely to improve the potential for meeting important objectives relating to emissions and energy use. Potentially adverse impacts on environmental components including ecology and water would need to be adequately mitigated at project level.

Area Based Transport Assessment Alternatives are assessed against Strategic Environmental Objectives on Table 7.6.

Selected Area Based Transport Assessment Alternative for the Plan: **Alternative A**

**Table 7.6 Assessment of Type 3 Alternatives against SEOs**

Alternative (selected alternative indicated in <b>bold</b> )	Likely to <b>Improve</b> status of SEOs		Potential <b>Conflict</b> with status of SEOs - likely to be mitigated		Probable <b>Conflict</b> with status of SEOs - unlikely to be mitigated	<b>No Likely</b> interaction with status of SEOs
	+		-		-	0
	to a <b>Greater</b> degree	to a <b>Lesser</b> degree	to a <b>Lesser</b> degree	to a <b>Greater</b> degree		
<b>Alternative A: Informing the Plan with an Area Based Transport Assessment</b>	<b>PHH A C MA BFF S W CH L</b>		<b>PHH A MA C BFF S W CH L</b>			
Alternative B: Not informing the Plan with an Area Based Transport Assessment		<b>PHH A MA C BFF S W CH L</b>		<b>PHH A C MA BFF S W CH L</b>		

### 7.3.5 Type 4 Alternatives: Transport Infrastructure Alternatives

Under **Transport Infrastructure Alternative A**, new transport infrastructure would be considered subject to environmental constraints, including those related to habitats and potential impacts (e.g. disturbance from lighting). This would include minimising river crossings, avoiding sensitive habitats, not increasing barriers to flood waters and sustainable design and construction techniques. By focusing on mitigation at both plan and project levels, Alternative A would offer the most certainty for environmental protection and management and would be more likely to result in important individual projects (relating to sustainable mobility and emissions/energy objectives) receiving permission.

Under **Transport Infrastructure Alternative B**, all additional environmental mitigation would be left to be defined in the future, at project level. This would offer the least certainty for environmental protection and management and would be more likely to result in important individual projects (relating to sustainable mobility and emissions objectives) not been given permission.

Transport Infrastructure Alternatives are assessed against Strategic Environmental Objectives on Table 7.7.

Selected Transport Infrastructure Alternative for the Plan: Alternative A

**Table 7.7 Assessment of Type 4 Alternatives against SEOs**

Alternative (selected alternative indicated in <b>bold</b> )	Likely to <b>Improve</b> status of SEOs		Potential <b>Conflict</b> with status of SEOs - likely to be mitigated		Probable <b>Conflict</b> with status of SEOs - unlikely to be mitigated	<b>No Likely</b> interaction with status of SEOs
	+	-	-	+	-	0
	to a <b>Greater</b> degree	to a <b>Lesser</b> degree	to a <b>Lesser</b> degree	to a <b>Greater</b> degree		
<b>Alternative A: Transport Infrastructure subject to environmental constraints</b>	<b>PHH A C MA BFF S W CH L</b>		<b>PHH A MAC BFF S W CH L</b>			
Alternative B: All Transport Infrastructure mitigation left to project level		<b>PHH A MAC BFF S W CH L</b>		<b>PHH A C MA BFF S W CH L</b>		

## 7.4 Selected Alternatives

Selected alternatives for the Plan from each of the types of alternatives that emerged from the planning/SEA process are indicated above.

These alternatives have been adopted by the Members having regard to both:

1. The environmental effects which were identified by the SEA and are detailed above; and
2. Planning - including social and economic - effects that also were considered by the Members.

## 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.

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

The interactions identified are reflective of likely significant environmental effects:

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

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

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

**Table 8.1 Strategic Environmental Objectives<sup>54</sup>**

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives
Biodiversity, Flora and Fauna	BFF	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 County's natural capital</li> </ul>

<sup>54</sup> See also Section 5

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives
<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 the County'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 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 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 SuDS, porous surfacing and green roofs) into development proposals</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</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 to electrification of road and rail transport modes</li> <li>Encourage the transition to a zero-carbon economy by facilitating the development of a grid infrastructure to support renewables and international connectivity. Reduce the average energy consumption per capita including promoting energy efficient buildings, retrofitting, smart-buildings, 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 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 County'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>

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives
<b>Cultural Heritage</b>	<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>
<b>Landscape</b>	<b>L</b>	Protect and enhance the landscape character	<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>

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

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

## 8.2 Cumulative Effects<sup>55</sup>

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

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

- Potential *intra-Plan* cumulative effects - these arise from the interactions between different types of potential environmental effects resulting from a plan, programme, etc. Where there are elevated levels of environmental sensitivities (such as those identified under Section 4), future development could result in environmental conflicts and lead to a deterioration in environmental integrity. The interrelationships between environmental components that help determine these potential effects are identified on Table 8.4 e.g. interrelationships between: human health and water quality; human health and air quality; human health and flood risk; and ecology and water quality.
- Potential *inter-Plan* cumulative effects - these arise when the effects of the implementation of one plan occur in combination with those of other plans, programmes, developments, etc.

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

Other policies, plans and programmes that have been considered by the assessment of effects include those which are detailed under Section 2.4 (and associated Appendix I "Relationship with Legislation, Plans and Programmes"), Section 4 and Section 5. Plans and programmes from various sectors will interact with the Plan, including those relating to land use planning. These plans and programmes are subject to their own environmental assessment requirements as relevant. Examples include:

- Land use policy, plans and programmes (e.g. the National Planning Framework, the Southern Regional Spatial and Economic Strategy, the Tipperary County Development Plan 2022-2028, adjoining Development Plans and Local Area Plans);

<sup>55</sup> The EPA's guidance note 'Good Practice Guidance note on cumulative effects assessment in SEA' has been considered in the assessment.

- Tipperary Local Economic and Community Plan and the Local Economic and Community Plans of adjoining counties;
- Energy policy, plans and programmes (e.g. Grid25 and associated Implementation Programme, Ireland's National Renewable Energy Action Plan 2010, Strategy for Renewable Energy 2012-2020, Draft National Energy and Climate Plan 2021-2030 and the Renewable Electricity Policy and Development Framework);
- Climate related policy, plans and programmes (e.g. the National Climate Policy Position and Climate Action 2014, Climate Action and Low Carbon Development Act 2015, as amended, Climate Action Plan 2023, National Mitigation Plan 2017, the National Adaptation Framework 2018, the Tipperary Climate Change Adaptation Strategy 2019-2024 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 and Southern Regional Waste Management Plan); and
- Environmental protection and management plans (e.g. River Basin Management Plans and Flood Risk Management Plans).

Potential cumulative/in combination effects include:

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

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

A variety of the issues covered by the Plan provisions are regional and county issues which are considered: at Regional Assembly level, in the Southern RSES and by planning authorities across the Region; and at County level, including through the Tipperary County Development Plan 2022-2028. The solutions to these issues are often regional solutions which are subject their own consenting procedures. Works arising outside of the Plan area as a result of providing for new development within the Plan area, including works arising as a result of the cumulative provision of development in the wider County and wider Southern Region, would potentially conflict with a number of environmental components, across the wider County and wider Southern Region and beyond, including: ecology, soil function, the

status of water bodies and the landscape. Some of these conflicts would be mitigated by measures which will be integrated into the Plan while some will be mitigated by measures arising out of separate consent procedures.

### **8.3 Overall Evaluation**

Tipperary County Council have integrated various recommendations arising from the SEA process into the Plan (see Section 9). Table 8.3 provides a detailed overall evaluation of the environmental effects arising from the Plan. The effects encompass all in-combination/cumulative effects arising from implementation of the Plan. The potentially significant adverse environmental effects (if unmitigated) arising from implementation of the Plan are detailed as are residual effects, taking into account mitigation integrated into both the Plan and the Tipperary County Development Plan 2022-2028 – see Section 9.

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

**Table 8.3 Overall Evaluation – Effects arising from the Plan**

Environmental Component	Environmental Effects, in combination with the wider planning framework Effects include in-combination effects that are planned for through the wider planning framework including the NPF and associated NDP, the Southern RSES, the Tipperary County Development Plan 2022-2028, 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 Plan area's existing built-up footprint) 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 County and beyond.</li> <li>• Contribution towards the maintenance of existing green infrastructure and associated ecosystem services, listed species, ecological connectivity and non-designated habitats.</li> <li>• Contribution towards protection and/or maintenance of biodiversity and flora and fauna by contributing towards the protection of natural capital including the environmental vectors of air, water and soil. Biodiversity and flora and fauna includes biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species (including birds and bats), listed/protected species, ecological connectivity and non-designated habitats (including terrestrial and aquatic habitats), and disturbance to biodiversity and flora and fauna – including terrestrial and aquatic biodiversity and flora and fauna.</li> <li>• Sustains existing sustainable rural management practices – and the communities who support them – to ensure the continuation of long-established managed landscapes and the flora and fauna that they contain.</li> </ul>	<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 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>



Environmental Component	Environmental Effects, in combination with the wider planning framework Effects include in-combination effects that are planned for through the wider planning framework including the NPF and associated NDP 2018, the Southern RSES, the Tipperary County Development Plan 2022-2028, 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>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 (including those within and adjacent to the Plan area's existing built-up footprint) 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 County and beyond.</li> <li>Contribution towards the protection of human health by facilitating development of lands (including those within and adjacent to the Plan area's existing built-up footprint) 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 County and beyond.</li> <li>Contributes towards protection of human health as a result of contributing towards the protection of natural capital including environmental vectors, including air and water.</li> </ul>	<ul 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>	<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 (including those within and adjacent to the Plan area's existing built-up footprint) 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 County and beyond.</li> <li>Contribution towards the protection of the environment from contamination the highest standards of remediation, and where appropriate to consultations with the EPA and other relevant bodies, will be required to resolve any instances of environmental pollution created by contaminated land.</li> </ul>	<ul 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>	<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>

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Environmental Component	Environmental Effects, in combination with the wider planning framework Effects include in-combination effects that are planned for through the wider planning framework including the NPF and associated NDP 2018, the Southern RSES, the Tipperary County Development Plan 2022-2028, 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>Water</b>	<ul style="list-style-type: none"> <li>Contribution towards the protection of water by facilitating development of lands (including those within and adjacent to the Plan area's existing built-up footprint) 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 County 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>
<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 (including those within and adjacent to the Plan area's existing built-up footprint) 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 County 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> </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>	<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>MA</b>

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Environmental Component	Environmental Effects, in combination with the wider planning framework Effects include in-combination effects that are planned for through the wider planning framework including the NPF and associated NDP 2018, the Southern RSES, the Tipperary County Development Plan 2022-2028, 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>Air and Climatic Factors</b>	<ul style="list-style-type: none"> <li>Contribution towards climate mitigation and adaptation by facilitating compact development of lands (including those within and adjacent to the Plan area's existing built-up footprint) 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 County 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.</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 within the town.</li> <li>Contributes towards protection of cultural heritage within the town by facilitating brownfield development and regeneration.</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.</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 and Stage 2 AA have been undertaken alongside the preparation of the Plan. The requirement for AA is provided under the EU Habitats Directive (Directive 1992/43/EEC). As part of the AA Screening process, the Council determined that it could not be excluded, on the basis of objective information, that the emerging Draft Plan, individually, or in combination with other plans and projects would have a likely adverse effect on the integrity of a European Site. Therefore, Stage 2 AA was determined as being required. The conclusion of the Stage 2 AA is that, following the application of mitigation, the Plan will not affect the integrity of the European Sites, alone or in combination with other plans or projects.<sup>56</sup>

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

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

## 8.5 Interactions with Climate Mitigation and Adaptation

As detailed in the Local Area Plan, the National Climate Action Plan 2023 provides a detailed plan for taking decisive action to achieve a 51% reduction in overall greenhouse gas emissions by 2030 and setting us 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 Action Plan (DECC, 2023).

It is a Core Ambition of the Tipperary County Development Plan 2022-2028 to enable a 'Climate Resilient, Sustainable and Low Carbon County' and to support a 51% reduction in greenhouse gases by 2030 in line with the National Climate Action Plan. The National Climate Action Plan and the County Development Plan sets out a schedule of actions. The LAP has incorporated those actions as they relate to spatial planning locally in Nenagh including those that influence the following; compact growth and sustainable mobility, sustainable transport measures, town-centre first, nature-based solutions, and flood risk and water management. A new 'Climate Action Plan' for Tipperary County Council will be prepared by the Council in 2023/24, and will also seek to support the roles of communities and other sectors in achieving their climate adaptation and mitigation targets.

Delivering Climate Action 2030 (County and City Management Association, 2021) is the strategy for local authorities for delivering on the Climate Action Charter. It sets out "to deliver transformative change and measurable climate action across our cities and counties and within our own organisations, through leadership, example and mobilising action at a local level." The Council, in partnership with the Sustainable Energy Authority of Ireland, will seek to work alongside communities and businesses to drive the change needed, create pathways for climate action and ensure the continued development of our cities and counties as sustainable places to live, work, visit and invest in. Existing structures such as the Climate Action Regional Offices, Public Participation Networks, Local Community Development Committees, Strategic Policy Committees and other statutory and non-statutory consultation and engagement can help enable this.

---

<sup>56</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.

The Local Area Plan will contribute towards climate action in combination with:

- The Climate Action Plan that identifies various climate mitigation and/or adaptation actions;
- The National Planning Framework, which has identified National Strategic Outcome Objectives 8 "Build Climate Resilience" and 9 "Support the transition to low carbon and clean energy" under National Strategic Outcome 8 "Transition to a Low Carbon and Climate Resilient Society"; and
- The Southern Regional Spatial and Economic Strategy that has identified various Regional Policy Objectives relating to climate action, including RPOs 87-107 under "Climate action and transition to a low carbon economy".

## **8.6 Interrelationship between Environmental Components**

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

Likely significant effects on environmental components which are identified include those which are interrelated; implementation of the Plan will not affect the interrelationships between these components. The presence of significant interrelationships between environmental components is identified on Table 8.4.

**Table 8.4 Presence of Interrelationships between Environmental Components**

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

## 8.7 Detailed Evaluation

For an explanation of SEO codes e.g. **BFF, PHH, S, W**, etc. refer to Table 8.1 on page 66.

The following applies to each of the sub-sections 8.7.1 to 8.7.8.

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 Mitigation Plan, the National Adaptation Framework, the Climate Action Plan, the Regional Spatial and Economic Strategy for the Southern Region and 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.

### 8.7.1 Chapter 1: Introduction

	Likely to Improve status of SEOs	Potential Conflict with status of SEOs - likely to be mitigated	Probable Conflict with status of SEOs - unlikely to be mitigated	No Likely interaction with status of SEOs
	+	-	-	0
<p><b>Summary</b></p> <p>This chapter provides an introduction to the Plan and outlines a Town and Socio-Economic Profile. Policy 1.1 commits to assessing all new development proposals within the boundary of the Nenagh and Environs Local Area Plan 2024-2030 in accordance with the policies, objectives and requirements of the Tipperary County Development Plan 2022-2028 (and any review thereof), and the Local Area Plan itself. For more details, please refer to the Plan.</p>	<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>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 8.6 of this report; and</li> <li>• Assessments of the selected alternatives for the Plan provided at Section 7 of this report.</li> </ul> <p>Implementing the Plan will help to direct incompatible development away from the most sensitive areas in the County and beyond and to focus on directing compact, sustainable development within and adjacent to the existing built-up footprint of Nenagh. Development of areas within and adjacent to the existing built-up footprint of Nenagh, which is generally more robust, better serviced and better connected than other lands elsewhere in the County and beyond, will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development will be accompanied by placemaking initiatives to enable the Plan area to become a more desirable place to live – so it can sustainably accommodate new residents and maintain and improve services to existing and future communities. Compatible sustainable development in more sensitive locations within the Plan area is also provided for, subject to various requirements relating to environmental protection and management being met.</p> <p>Policy 1.1 will contribute towards the sustainable development of the Plan area and the protection and management of the environment.</p>				

## 8.7.2 Chapter 2: Planning and Development Strategy

	Likely to <b>Improve</b> status of SEOs	Potential <b>Conflict</b> with status of SEOs - likely to be mitigated	Probable <b>Conflict</b> with status of SEOs - unlikely to be mitigated	<b>No Likely</b> interaction with status of SEOs
	+	-	-	0
<b>Summary</b>  This chapter sets out the overall Planning and Development Strategy for the proper planning and sustainable development of Nenagh. 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>		
<b>Commentary</b>  The assessment of the Plan’s Planning and Development Strategy for the proper planning and sustainable development of Nenagh against Strategic Environmental Objectives (SEOs BFF, PHH, S, W, MA, A, C, CH and L) is consistent with the: <ul style="list-style-type: none"> <li>• Environmental effects detailed under subsections 8.2 to 8.6 of this report; and</li> <li>• Assessments of the selected alternatives for the Plan provided at Section 7 of this report.</li> </ul> <p>Implementing the Plan will help to direct incompatible development away from the most sensitive areas in the County and beyond and to focus on directing compact, sustainable development within and adjacent to the existing built-up footprint of Nenagh. Development of areas within and adjacent to the existing built-up footprint of Nenagh, which is generally more robust, better serviced and better connected than other lands elsewhere in the County and beyond, will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development will be accompanied by placemaking initiatives to enable the Plan area to become a more desirable place to live – so it can sustainably accommodate new residents and maintain and improve services to existing and future communities. Compatible sustainable development in more sensitive locations within the Plan area is also provided for, subject to various requirements relating to environmental protection and management being met.</p> <p>The Planning and Development Strategy would contribute towards the Statutory consent granting and decision-making framework for land use developments and activities and sustainable development of the Plan area, in combination with other Plan provisions and other plans, programmes, strategies, etc. Potential adverse environmental effects arising from land use development and activities include in-combination effects arising from services and infrastructure to service development, for example those relating to water services, transport and energy.</p> <p>The SEA process that has been undertaken alongside the preparation of the Plan has brought about various changes to the emerging Plan through an iterative process. Some of these measures are reproduced under Section 9 “Mitigation Measures” of this report – alongside existing measures from the County Development Plan. By integrating SEA recommendations into the Plan, Tipperary County Council is helping to ensure that:</p> <ul style="list-style-type: none"> <li>• The potential significant adverse effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are avoided, reduced or offset; and</li> <li>• The beneficial environmental effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are maximised.</li> </ul> <p>The Plan’s Planning and Development Strategy will contribute towards the sustainable development of the Plan area and the protection and management of the environment.</p>				



### 8.7.3 Chapter 3: Town Centre Strategy

	Likely to <b>Improve</b> status of SEOs	Potential <b>Conflict</b> with status of SEOs - likely to be mitigated	Probable <b>Conflict</b> with status of SEOs - unlikely to be mitigated	<b>No Likely</b> interaction with status of SEOs
	+	-	-	0
<b>Summary</b>	<b>BFF PHH S W MA A C CH L</b>	<b>BFF PHH S W MA A C CH L</b>		
<p>This Chapter sets out the Town Centre Strategy. For more details, please refer to the Plan.</p>				
<b>Commentary</b>				
<p>The assessment of the Plan’s Town Centre Strategy 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 8.6 of this report; and</li> <li>• Assessments of the selected alternatives for the Plan provided at Section 7 of this report.</li> </ul> <p>Implementing the Plan will help to direct incompatible development away from the most sensitive areas in the County and beyond and to focus on directing compact, sustainable development within and adjacent to the existing built-up footprint of Nenagh. Development of areas within and adjacent to the existing built-up footprint of Nenagh, which is generally more robust, better serviced and better connected than other lands elsewhere in the County and beyond, will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development will be accompanied by placemaking initiatives to enable the Plan area to become a more desirable place to live – so it can sustainably accommodate new residents and maintain and improve services to existing and future communities. Compatible sustainable development in more sensitive locations within the Plan area is also provided for, subject to various requirements relating to environmental protection and management being met.</p> <p>The Town Centre Strategy would contribute towards the Statutory consent granting and decision-making framework for land use developments and activities and sustainable development of the Plan area, in combination with other Plan provisions and other plans, programmes, strategies, etc. Potential adverse environmental effects arising from land use development and activities include in-combination effects arising from services and infrastructure to service development, for example those relating to water services, transport and energy.</p> <p>The Town Centre Strategy embodies and support the principles of Town Centre First and compact development. In line with the NPF, at least 30% of new residential development is facilitated in the town centre area and there is a general focus for new growth on the Compact Growth area of the town. Key regeneration sites are identified as well as well-connected ‘neighbourhood’ expansion opportunities, with a planned approach to the development of neighbourhoods and appropriate density guidance. Complimentary new residential sites are provided in neighbourhoods adjoining the town centre area to support the developed of additional options to meet the housing needs of the town. Proportionate growth of employment and industry are also supported adjacent to existing employment sites in the town. The Strategy strengthens the town centre and reduces pressure for expansion into greenfield out of town sites, whilst at the same time ensuring that projected growth can be delivered.</p> <p>Key Planning Criteria are integrated into the Plan in order to guide the development of Regeneration Sites and Regeneration Areas.</p> <p>The SEA process that has been undertaken alongside the preparation of the Plan has brought about various changes to the emerging Plan through an iterative process. Some of these measures are reproduced under Section 9 “Mitigation Measures” of this report – alongside existing measures from the County Development Plan. By integrating SEA recommendations into the Plan, Tipperary County Council is helping to ensure that:</p> <ul style="list-style-type: none"> <li>• The potential significant adverse effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are avoided, reduced or offset; and</li> <li>• The beneficial environmental effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are maximised.</li> </ul> <p>The Plan’s Town Centre Strategy will contribute towards the sustainable development of the Plan area and the protection and management of the environment.</p>				

### 8.7.4 Chapter 4: Economic Development Strategy

	Likely to Improve status of SEOs	Potential Conflict with status of SEOs - likely to be mitigated	Probable Conflict with status of SEOs - unlikely to be mitigated	No Likely interaction with status of SEOs
	+	-	-	0
<b>Summary</b>	<b>BFF PHH S W MA A C H L</b>	<b>BFF PHH S W MA A C H L</b>		
<p>This chapter sets out the Economic Development Strategy. For more details, please refer to the Plan.</p>				
<b>Commentary</b>				
<p>The assessment of the Plan’s Economic Development Strategy 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 8.6 of this report; and</li> <li>• Assessments of the selected alternatives for the Plan provided at Section 7 of this report.</li> </ul> <p>Implementing the Plan will help to direct incompatible development away from the most sensitive areas in the County and beyond and to focus on directing compact, sustainable development within and adjacent to the existing built-up footprint of Nenagh. Development of areas within and adjacent to the existing built-up footprint of Nenagh, which is generally more robust, better serviced and better connected than other lands elsewhere in the County and beyond, will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development will be accompanied by placemaking initiatives to enable the Plan area to become a more desirable place to live – so it can sustainably accommodate new residents and maintain and improve services to existing and future communities. Compatible sustainable development in more sensitive locations within the Plan area is also provided for, subject to various requirements relating to environmental protection and management being met.</p> <p>The Economic Development Strategy would contribute towards the Statutory consent granting and decision-making framework for land use developments and activities and sustainable development of the Plan area, in combination with other Plan provisions and other plans, programmes, strategies, etc. Potential adverse environmental effects arising from land use development and activities include in-combination effects arising from services and infrastructure to service development, for example those relating to water services, transport and energy.</p> <p>The Economic Development Strategy identifies the Lisbunny Industrial Estate as a Strategic Employment Area and includes various provisions to enable enterprise and employment elsewhere.</p> <p>A Tourism Strategy, which takes account of other plans and programmes such as ‘Tipperary Transforming – Tourism Product Development Plan 2020 – 2030’ and the ‘Lough Derg Visitor Experience Development Plan 2020-2024’, is included as part of the Economic Development Strategy. An increase in the number and dwell time of visitors would have the potential to contribute towards potential adverse effects, such as in-combination effects arising from services and infrastructure to service development including tourism e.g. developments/operation of developments relating to water services, transport, energy, access or accommodation. The mitigation of potential adverse effects arising would be contributed towards by Local Area Plan/County Development Plan provisions, including those relating to infrastructure capacity, visitor management, green infrastructure and ecosystem services.</p> <p>The development of new and existing greenways, blueways, trails and walking and cycling routes has the potential to contribute towards sustainable mobility and a better management of mobility and tourism in sensitive areas, thereby benefitting various environmental components, including habitats, at certain locations. The development of green infrastructure can achieve synergies with regard to the provision of open space amenities, sustainable mobility, the sustainable management of water, the protection and management of biodiversity, the protection of cultural heritage and the protection of designated landscape sensitivities. The development of these projects, however, presents a variety of potentially adverse environmental effects that would, if unmitigated, have the potential to arise from both the construction and operation of such developments and/or their ancillary infrastructure. These types of infrastructure are often constructed in ecologically and visually sensitive areas adjacent to the banks of rivers and streams. Potential adverse effects would be mitigated both by measures which have been integrated into the Plan which provide for and contribute towards environmental protection, environmental management and sustainable development (including minimising river crossings, avoiding sensitive habitats, not increasing barriers to flood waters, sustainable design and construction techniques, visitor management measures and invasive species management - see Section 9 of this report) and by measures arising from lower tier assessments (including those for the preparation of lower tier plans and projects).</p>				

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

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

The Plan's Economic Development Strategy will contribute towards the sustainable development of the Plan area and the protection and management of the environment.

## 8.7.5 Chapter 5: Sustainable Communities

	Likely to Improve status of SEOs	Potential Conflict with status of SEOs - likely to be mitigated	Probable Conflict with status of SEOs - unlikely to be mitigated	No Likely interaction with status of SEOs
	+	-	-	0
<b>Summary</b> This chapter sets out provisions for the development of 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>		
<b>Commentary</b> The assessment of the Plan's Sustainable Communities provisions against Strategic Environmental Objectives (SEOs BFF, PHH, S, W, MA, A, C, CH and L) is consistent with the: <ul style="list-style-type: none"> <li>• Environmental effects detailed under subsections 8.2 to 8.6 of this report; and</li> <li>• Assessments of the selected alternatives for the Plan provided at Section 7 of this report.</li> </ul> Implementing the Plan will help to direct incompatible development away from the most sensitive areas in the County and beyond and to focus on directing compact, sustainable development within and adjacent to the existing built-up footprint of Nenagh. Development of areas within and adjacent to the existing built-up footprint of Nenagh, which is generally more robust, better serviced and better connected than other lands elsewhere in the County and beyond, will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development will be accompanied by placemaking initiatives to enable the Plan area to become a more desirable place to live – so it can sustainably accommodate new residents and maintain and improve services to existing and future communities. Compatible sustainable development in more sensitive locations within the Plan area is also provided for, subject to various requirements relating to environmental protection and management being met. <p>The Sustainable Communities provisions would contribute towards the Statutory consent granting and decision-making framework for land use developments and activities and sustainable development of the Plan area, in combination with other Plan provisions and other plans, programmes, strategies, etc. Potential adverse environmental effects arising from land use development and activities include in-combination effects arising from services and infrastructure to service development, for example those relating to water services, transport and energy.</p> Provisions include those related to the town centre (including those related to the Martyr's Road Masterplan), to neighbourhoods adjoining the town centre area and to one-off housing. The SEA process that has been undertaken alongside the preparation of the Plan has brought about various changes to the emerging Plan through an iterative process. Some of these measures are reproduced under Section 9 "Mitigation Measures" of this report – alongside existing measures from the County Development Plan. By integrating SEA recommendations into the Plan, Tipperary County Council is helping to ensure that: <ul style="list-style-type: none"> <li>• The potential significant adverse effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are avoided, reduced or offset; and</li> <li>• The beneficial environmental effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are maximised.</li> </ul> The Plan's Sustainable Communities provisions will contribute towards the sustainable development of the Plan area and the protection and management of the environment.				

## 8.7.6 Chapter 6: Transport and Connectivity

	Likely to <b>Improve</b> status of SEOs	Potential <b>Conflict</b> with status of SEOs - likely to be mitigated	Probable <b>Conflict</b> with status of SEOs - unlikely to be mitigated	<b>No Likely</b> interaction with status of SEOs
	+	-	-	0
<b>Summary</b>	<b>BFF PHH S W MA A C CH L</b>	<b>BFF PHH S W MA A C CH L</b>		
<p>This chapter sets out provisions for transport and connectivity. For more details, please refer to the Plan.</p>				
<b>Commentary</b>				
<p>The assessment of the Plan’s Transport and Connectivity provisions 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 8.6 of this report; and</li> <li>• Assessments of the selected alternatives for the Plan provided at Section 7 of this report.</li> </ul> <p>Implementing the Plan will help to direct incompatible development away from the most sensitive areas in the County and beyond and to focus on directing compact, sustainable development within and adjacent to the existing built-up footprint of Nenagh. Development of areas within and adjacent to the existing built-up footprint of Nenagh, which is generally more robust, better serviced and better connected than other lands elsewhere in the County and beyond, will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development will be accompanied by placemaking initiatives to enable the Plan area to become a more desirable place to live – so it can sustainably accommodate new residents and maintain and improve services to existing and future communities. Compatible sustainable development in more sensitive locations within the Plan area is also provided for, subject to various requirements relating to environmental protection and management being met.</p> <p>The Transport and Connectivity provisions would contribute towards the Statutory consent granting and decision-making framework for land use developments and activities and sustainable development of the Plan area, in combination with other Plan provisions and other plans, programmes, strategies, etc. Potential adverse environmental effects arising from land use development and activities include in-combination effects arising from services and infrastructure to service development, for example those relating to water services, transport and energy.</p> <p>An Area Based Transport Assessment, the findings of which are provided in a Local Transport Plan that is appended to the Local Area Plan, has informed the Local Area Plan, guiding the future transport and mobility needs of the Local Area Plan area, taking into account the transport demand arising from existing and projected development both within the Local Area Plan boundary and the wider area of influence. The Transport and Connectivity provisions seek to maximise opportunities for the integration of land use and transport planning, with an emphasis on cycling, walking and public transport and will help to: facilitate a modal shift away from private vehicles; give back public space in the town to the citizens and visitors to the town; provide a sustainable and safe transport environment. Provisions are included relating to active travel (walking and cycling), public transport, demand management and roads and traffic management. The integration of Area Based Transport Assessment/Local Transport Plan recommendations into the Local Area Plan provides a more coordinated and more orderly provision of transport infrastructure and services and associated benefits with respect to sustainable mobility, emissions and compact development.</p> <p>The Transport and Connectivity provisions would facilitate improvements in sustainable mobility, including a shift from car to more sustainable and non-motorised transport modes, through the development of transport infrastructure and services, management of traffic and transitioning to lower emission vehicles. Improvements in sustainable mobility will result in the following positive effects:</p> <ul style="list-style-type: none"> <li>○ Reductions in/limits in increases of greenhouse gas emissions and associated achievement of legally binding greenhouse gas emissions targets;</li> <li>○ Reductions in/limits in increases of all emissions to air (including noise) and associated achievement of air quality objectives, thereby contributing towards improvement or air quality and protection of human health;</li> <li>○ Reductions in/limits in increases of consumption of non-renewable energy sources and achievement of legally binding renewable energy targets; and</li> <li>○ Improvements in energy security.</li> </ul> <p>The Transport and Connectivity provisions are likely to facilitate a more consolidated development of the Plan area, reuse and regeneration of brownfield lands and reductions in sprawl. In this way, a higher efficiency of land utilisation, increases in sustainable mobility and a reduction in the need to develop greenfield lands would be facilitated. The reduced need to develop greenfield lands sprawled further away from the existing built envelope of the town with associated higher levels of land take would result in lower adverse effects as a result of upon ecology, landscape designations, architectural and archaeological heritage and soil. Among other positive environmental effects, the enhancement of the public realm (including cultural heritage and its context) in the town centre would be facilitated by providing for the</p>				

replacement of motorised transport modes with more sustainable and non-motorised modes including cycling and walking. By reorientating of transport and land use planning away from the facilitation of the private car, the following can be achieved: improved air quality; greater road space reallocation to sustainable modes; and the improvement of the visual environment by reducing the effects of cars parked - both on-street and in off-street car parks.

Potential adverse environmental effects arising from the Transport and Connectivity provisions include:

- Contributions towards travel related greenhouse gas and other emissions to air (including noise) and associated potential negative effects on human health as a result of facilitating transport infrastructure and services. Such effects would be mitigated by various Plan measures relating sustainable mobility.
- By contributing towards a reduction in the use of the private car for trips, the Local Transport Plan provides for an overall reduction in the numbers of people exposed to pollution from emissions to air, including unacceptable noise levels from traffic, in particular within the town centre. The Area Based Transport Assessment has considered the potential for displacement of traffic to lead to localised potential impacts in terms of increased population exposure to air pollutants and/or elevated noise levels and identified that such impacts are unlikely to be significant. Proposed interventions shall ensure that they are consistent with all relevant legislative requirements.
- The development of new and existing greenways, blueways, trails and walking and cycling routes has the potential to contribute towards sustainable mobility and a better management of mobility and tourism in sensitive areas, thereby benefitting various environmental components, including habitats, at certain locations. The development of green infrastructure can achieve synergies with regard to the provision of open space amenities, sustainable mobility, the sustainable management of water, the protection and management of biodiversity, the protection of cultural heritage and the protection of designated landscape sensitivities. The development of these projects, however, presents a variety of potentially adverse environmental effects that would, if unmitigated, have the potential to arise from both the construction and operation of such developments and/or their ancillary infrastructure. These types of infrastructure are often constructed in ecologically and visually sensitive areas adjacent to the banks of rivers and streams. Potential adverse effects would be mitigated both by measures which have been integrated into the Plan which provide for and contribute towards environmental protection, environmental management and sustainable development (including minimising river crossings, avoiding sensitive habitats, not increasing barriers to flood waters, sustainable design and construction techniques, visitor management measures and invasive species management - see Section 9 of this report) and by measures arising from lower tier assessments (including those for the preparation of lower tier plans and projects).

As identified in the Plan, the identification of transport infrastructure proposals, including locations and any associated mapping, that is not already permitted or provided for by existing plans/programmes/etc. is non-binding and indicative. New transport infrastructure will be considered subject to environmental constraints, including those related to habitats and potential impacts (e.g. disturbance from lighting). This will include minimising river crossings, avoiding sensitive habitats, not increasing barriers to flood waters and sustainable design and construction techniques. As per Chapter 12 of the County Plan (under '12.5.1 Investment in Strategic Road Infrastructure'), new transport infrastructure projects contained within this Plan, including greenways and blueways, that are not already provided for by existing plans/programmes or are not already permitted, will be subject to feasibility assessment, considering need, environmental sensitivities and objectives relating to sustainable mobility. Where feasibility is established, a Corridor and Route Selection Process will be undertaken, where appropriate, in two stages: Stage 1 – Route Corridor Identification, Evaluation and Selection; and Stage 2 – Route Identification.

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

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

The Plan's Transport and Connectivity provisions will contribute towards the sustainable development of the Plan area and the protection and management of the environment.

## 8.7.7 Chapter 7: Recognising our Local Heritage

	Likely to <b>Improve</b> status of SEOs	Potential <b>Conflict</b> with status of SEOs - likely to be mitigated	Probable <b>Conflict</b> with status of SEOs - unlikely to be mitigated	<b>No Likely</b> interaction with status of SEOs
	+	-	-	0
<b>Summary</b>	<b>BFF PHH S W MA A C CH L</b>	<b>BFF PHH S W MA A C CH L</b>		
<p>This chapter sets out provisions for local heritage, including natural heritage and built, social and cultural heritage. For more details, please refer to the Plan.</p>				
<b>Commentary</b>				
<p>The assessment of the Plan’s local heritage provisions 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 8.6 of this report; and</li> <li>• Assessments of the selected alternatives for the Plan provided at Section 7 of this report.</li> </ul> <p>Implementing the Plan will help to direct incompatible development away from the most sensitive areas in the County and beyond and to focus on directing compact, sustainable development within and adjacent to the existing built-up footprint of Nenagh. Development of areas within and adjacent to the existing built-up footprint of Nenagh, which is generally more robust, better serviced and better connected than other lands elsewhere in the County and beyond, will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development will be accompanied by placemaking initiatives to enable the Plan area to become a more desirable place to live – so it can sustainably accommodate new residents and maintain and improve services to existing and future communities. Compatible sustainable development in more sensitive locations within the Plan area is also provided for, subject to various requirements relating to environmental protection and management being met.</p> <p>The Plan’s local heritage provisions would contribute towards the Statutory consent granting and decision-making framework for land use developments and activities and sustainable development of the Plan area, in combination with other Plan provisions and other plans, programmes, strategies, etc. Potential adverse environmental effects arising from land use development and activities include in-combination effects arising from services and infrastructure to service development, for example those relating to water services, transport and energy.</p> <p>The development of new and existing greenways, blueways, trails and walking and cycling routes has the potential to contribute towards sustainable mobility and a better management of mobility and tourism in sensitive areas, thereby benefitting various environmental components, including habitats, at certain locations. The development of green infrastructure can achieve synergies with regard to the provision of open space amenities, sustainable mobility, the sustainable management of water, the protection and management of biodiversity, the protection of cultural heritage and the protection of designated landscape sensitivities. The development of these projects, however, presents a variety of potentially adverse environmental effects that would, if unmitigated, have the potential to arise from both the construction and operation of such developments and/or their ancillary infrastructure. These types of infrastructure are often constructed in ecologically and visually sensitive areas adjacent to the banks of rivers and streams. Potential adverse effects would be mitigated both by measures which have been integrated into the Plan which provide for and contribute towards environmental protection, environmental management and sustainable development (including minimising river crossings, avoiding sensitive habitats, not increasing barriers to flood waters, sustainable design and construction techniques, visitor management measures and invasive species management - see Section 9 of this report) and by measures arising from lower tier assessments (including those for the preparation of lower tier plans and projects).</p> <p>The SEA process that has been undertaken alongside the preparation of the Plan has brought about various changes to the emerging Plan through an iterative process. Some of these measures are reproduced under Section 9 “Mitigation Measures” of this report – alongside existing measures from the County Development Plan. By integrating SEA recommendations into the Plan, Tipperary County Council is helping to ensure that:</p> <ul style="list-style-type: none"> <li>• The potential significant adverse effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are avoided, reduced or offset; and</li> <li>• The beneficial environmental effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are maximised.</li> </ul>				

A focus of the Plan’s local heritage (including natural heritage and built, social and cultural heritage) provisions is to ensure the appropriate protection and management of natural heritage and cultural, including architectural and archaeological heritage – many of the provisions are repeated in Section 9 “Mitigation Measures” of this report. These provisions will contribute towards the sustainable development of the Plan area and the protection and management of the environment.

## 8.7.8 Chapter 8: Infrastructure, Energy and Utilities

	Likely to Improve status of SEOs	Potential Conflict with status of SEOs - likely to be mitigated	Probable Conflict with status of SEOs - unlikely to be mitigated	No Likely interaction with status of SEOs
	+	-	-	0
<b>Summary</b>	<b>BFF PHH S W MA A C CH L</b>	<b>BFF PHH S W MA A C CH L</b>		
<p>This chapter sets out provisions for infrastructure, energy and utilities. For more details, please refer to the Plan.</p> <p><b>Commentary</b></p> <p>The assessment of the Plan’s infrastructure, energy and utilities provisions 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 8.6 of this report; and</li> <li>• Assessments of the selected alternatives for the Plan provided at Section 7 of this report.</li> </ul> <p>Implementing the Plan will help to direct incompatible development away from the most sensitive areas in the County and beyond and to focus on directing compact, sustainable development within and adjacent to the existing built-up footprint of Nenagh. Development of areas within and adjacent to the existing built-up footprint of Nenagh, which is generally more robust, better serviced and better connected than other lands elsewhere in the County and beyond, will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development will be accompanied by placemaking initiatives to enable the Plan area to become a more desirable place to live – so it can sustainably accommodate new residents and maintain and improve services to existing and future communities. Compatible sustainable development in more sensitive locations within the Plan area is also provided for, subject to various requirements relating to environmental protection and management being met.</p> <p>The infrastructure, energy and utilities provisions would contribute towards the Statutory consent granting and decision-making framework for land use developments and activities and sustainable development of the Plan area, in combination with other Plan provisions and other plans, programmes, strategies, etc. Potential adverse environmental effects arising from land use development and activities include in-combination effects arising from services and infrastructure to service development, for example those relating to water services, transport and energy.</p> <p>Provisions relating to energy, would contribute towards achieving various government objectives and targets including those relating to energy security, climate mitigation and reducing greenhouse gas emissions and increasing the amount of energy to be consumed from renewable sources. Further general commentary on the types of potential effects arising from certain renewable energy types is provided below.</p> <p><b>Hydro-Energy</b>                      Positive Effects: Contribution towards renewable energy and minimisation of greenhouse gases targets                      Potential Negative Effects, if unmitigated:</p> <ul style="list-style-type: none"> <li>• Depending on the scale and location of the development there is potential for impacts to occur on biodiversity, in particular aquatic biodiversity</li> <li>• Potential to impact upon the morphological, biological and chemical status of waters - this could interact with drinking water sources (in freshwater) and biodiversity</li> <li>• Potential interactions leading to change in structure of soil and geology and sediment regimes in rivers</li> <li>• Operation could impact upon flood risk elsewhere</li> <li>• Potential impacts upon archaeological heritage or nearby architectural heritage, including context</li> <li>• Changes to the character of locations may occur however visual impacts would depend upon, inter alia, the size of the installation, ancillary facilities and the perception and visibility of the relevant area</li> </ul> <p><b>Bio-Energy</b>                      Positive Effects: Contribution towards renewable energy and minimisation of greenhouse gases targets. Can provide for the use of agricultural and other wastes                      Potential Negative Effects, if unmitigated:</p> <ul style="list-style-type: none"> <li>• Potential impact upon designated and non-designated biodiversity and flora and fauna arising from changes in vegetation. Soil structure may also be impacted upon.</li> <li>• Changes in farming practices may lead to changes in drainage and runoff which could impact upon biological and chemical status of waters - - this could interact with drinking water sources and biodiversity</li> <li>• Potential human health impact: odour and noise from operation of plants</li> </ul>				

## SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

- Potential impacts upon traffic during operation due to transportation of fuel to plants
- Fuels derived from bio-mass still produce emissions however these are less than those derived from fossil fuels
- Changes to the land cover of areas could occur however visual impacts would depend on perception of the relevant area;
- Biomass plants may have visual impacts - these would depend on perception of the relevant area

### Wind Energy

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

Potential Negative Effects, if unmitigated:

- Potential impacts include those associated with construction and operation of the turbines and ancillary facilities and infrastructure (including roads and electrical infrastructure)
- Potential human health impact: shadow flicker, noise, and impacts arising from landslides
- Potential impact upon designated and non-designated biodiversity and flora and fauna including birdlife and marine habitats
- Potential loss of soil/subsoil/geological stability, including peat slippage
- Potential erosion of peatlands as a result of wind farm and ancillary infrastructure (e.g. roads) development, alone and in combination with forestry
- Potential interactions leading to change in structure of soil and geology and changes to drainage
- Potential impacts on water status during construction – this could interact with drinking water sources and biodiversity
- Potential impacts upon the context of protected archaeological and architectural heritage – including the context of this heritage – as well as unknown archaeological heritage
- Potential impacts upon traffic during construction due to transportation of turbine components
- Changes to the character of areas would be likely to occur however visual impacts would depend on various factors including the size, number and spacing of the turbines, perception of the relevant areas and any cumulative effect arising from multiple wind farms

### Solar Energy

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

Potential Negative Effects, if unmitigated:

- Potential impacts on architectural heritage – including the context of this heritage – at micro scale
- Potential impacts on habitats and species and micro scale
- Large scale installations may have visual impacts – these would depend on perception of the relevant area

### Geothermal Energy

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

Potential Negative Effects, if unmitigated:

- Potential impacts upon the status of waters and ecology contained within, especially arising from changes in the temperature of groundwater which can impact upon the structure and ecology of the aquifer and any dependent surface waters - this could interact with drinking water sources
- Potential interactions leading to change in structure of soil and geology
- Potential impacts upon archaeology, including unknown underground archaeology
- Potential impacts upon on site water services
- Potential impacts upon context of archaeological and architectural heritage arising from surface installation

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

Waste Management provisions incorporate circular economy principles that are supported in the RSES.

It is policy of the Plan to require applications for development under the Plan to 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.

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

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

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

The Plan's infrastructure, energy and utilities provisions will contribute towards the sustainable development of the Plan area and the protection and management of the environment.



## 8.7.9 Chapter 9: Land Use Zoning Framework

	Likely to <b>Improve</b> status of SEOs	Potential <b>Conflict</b> with status of SEOs - likely to be mitigated	Probable <b>Conflict</b> with status of SEOs - unlikely to be mitigated	<b>No Likely</b> interaction with status of SEOs
	+	-	-	0
<b>Summary</b>	<b>BFF PHH S W MA A C CH L</b>	<b>BFF PHH S W MA A C CH L</b>		
<p>This chapter sets out the Plan’s Land Use Zoning Framework. For more details, please refer to the Plan.</p>				
<p><b>Commentary</b></p> <p>The assessment of the Plan’s Land Use Zoning Framework 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 8.6 of this report; and</li> <li>• Assessments of the selected alternatives for the Plan provided at Section 7 of this report.</li> </ul> <p>Implementing the Plan will help to direct incompatible development away from the most sensitive areas in the County and beyond and to focus on directing compact, sustainable development within and adjacent to the existing built-up footprint of Nenagh. Development of areas within and adjacent to the existing built-up footprint of Nenagh, which is generally more robust, better serviced and better connected than other lands elsewhere in the County and beyond, will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development will be accompanied by placemaking initiatives to enable the Plan area to become a more desirable place to live – so it can sustainably accommodate new residents and maintain and improve services to existing and future communities. Compatible sustainable development in more sensitive locations within the Plan area is also provided for, subject to various requirements relating to environmental protection and management being met.</p> <p>The Land Use Zoning Framework would contribute towards the Statutory consent granting and decision-making framework for land use developments and activities and sustainable development of the Plan area, in combination with other Plan provisions and other plans, programmes, strategies, etc. Potential adverse environmental effects arising from land use development and activities include in-combination effects arising from services and infrastructure to service development, for example those relating to water services, transport and energy.</p> <p>The SEA process that has been undertaken alongside the preparation of the Plan has brought about various changes to the emerging Plan through an iterative process. Some of these measures are reproduced under Section 9 “Mitigation Measures” of this report – alongside existing measures from the County Development Plan. By integrating SEA recommendations into the Plan, Tipperary County Council is helping to ensure that:</p> <ul style="list-style-type: none"> <li>• The potential significant adverse effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are avoided, reduced or offset; and</li> <li>• The beneficial environmental effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are maximised.</li> </ul> <p>Environmental considerations were integrated into the Local Area Plan’s zoning through an interdisciplinary approach, which was informed by the environmental considerations identified by the SEA, AA and SFRA processes.</p> <p>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, Southern RSES and the Tipperary County Development Plan 2022-2028.</p> <p>The detailed Plan preparation process undertaken by the Planning Department combined with specialist input from the SFRA process facilitated zoning that helps to avoid inappropriate development being permitted in areas of elevated flood risk. Also taken into account were environmental sensitivities relating to ecology, cultural heritage, landscape and water.</p> <p>The Plan’s Land Use Zoning Framework provisions will contribute towards the sustainable development of the Plan area and the protection and management of the environment.</p>				

### 8.7.10 Chapter 10: Monitoring and Evaluation

	Likely to <b>Improve</b> status of SEOs	Potential <b>Conflict</b> with status of SEOs - likely to be mitigated	Probable <b>Conflict</b> with status of SEOs - unlikely to be mitigated	<b>No Likely</b> interaction with status of SEOs
	+	-	-	0
<b>Summary</b>	<b>BFF PHH S W MA A C CH L</b>	<b>BFF PHH S W MA A C CH L</b>		
<p>This chapter looks at how implementation of the Plan will be monitored and evaluated.</p>				
<b>Commentary</b>				
<p>The assessment of the Plan’s Monitoring and Evaluation provisions 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 8.6 of this report; and</li> <li>• Assessments of the selected alternatives for the Plan provided at Section 7 of this report.</li> </ul> <p>Implementing the Plan will help to direct incompatible development away from the most sensitive areas in the County and beyond and to focus on directing compact, sustainable development within and adjacent to the existing built-up footprint of Nenagh. Development of areas within and adjacent to the existing built-up footprint of Nenagh, which is generally more robust, better serviced and better connected than other lands elsewhere in the County and beyond, will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development will be accompanied by placemaking initiatives to enable the Plan area to become a more desirable place to live – so it can sustainably accommodate new residents and maintain and improve services to existing and future communities. Compatible sustainable development in more sensitive locations within the Plan area is also provided for, subject to various requirements relating to environmental protection and management being met.</p> <p>Implementation of the Plan will contribute towards the Statutory consent granting and decision-making framework for land use developments and activities and sustainable development of the Plan area, in combination with other Plan provisions and other plans, programmes, strategies, etc. Potential adverse environmental effects arising from land use development and activities include in-combination effects arising from services and infrastructure to service development, for example those relating to water services, transport and energy.</p> <p>The SEA process that has been undertaken alongside the preparation of the Plan has brought about various changes to the emerging Plan through an iterative process. Some of these measures are reproduced under Section 9 “Mitigation Measures” of this report – alongside existing measures from the County Development Plan. By integrating SEA recommendations into the Plan, Tipperary County Council is helping to ensure that:</p> <ul style="list-style-type: none"> <li>• The potential significant adverse effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are avoided, reduced or offset; and</li> <li>• The beneficial environmental effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are maximised.</li> </ul> <p>The Plan’s Monitoring and Evaluation provisions will contribute towards the successful implementation of the Plan, which provides for the sustainable development and the protection and management of the environment.</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, 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:

- Strategic work undertaken by the Council to ensure contribution towards environmental protection and sustainable development;
- Considering alternatives for the Plan;
- The integration of environmental considerations into zoning provisions of the Plan;
- The integration of individual SEA, AA and SFRA provisions into the text of the Plan; and
- The integration of individual provisions into the text of the Tipperary County Development Plan 2022-2028.

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

In advance of the placing of the Draft Plan on public display, Tipperary County Council undertook various works in order to inform the preparation of the Plan. This included a detailed population analysis and preparation of a Local Transport Plan and Serviced Land Assessment, which have informed and are appended to the Plan.

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

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

### **9.3 Consideration of Alternatives**

Although strategic alternatives in relation to the content of the Plan were guided by higher level planning objectives (see Section 6), as part of the Plan preparation/SEA process, the Council considered a number of alternatives for the Plan.

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

## **9.4 Integration of environmental considerations into the Zoning provisions of the Plan**

Environmental considerations, including those relating to sustainable and compact growth, sustainable mobility, sustainable infrastructure, flood risk and ecology, were integrated into the Plan's zoning provisions through an interdisciplinary approach.

The Plan's land use zoning seeks to achieve sustainable and compact growth, taking into account the various requirements set out in the higher-level NPF, Southern RSES and Tipperary County Development Plan 2022-2028.

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

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

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

In addition to the individual provisions integrated into the text of the Local Area Plan, individual provisions relating to environmental protection and management have been integrated into the existing Tipperary County Development Plan 2022-2028. These measures, which must be complied with by development under the Local Area Plan, are identified alongside the Local Area Plan measures on Table 9.1.

**Table 9.1 Integration of Environmental Considerations into the Plan<sup>57</sup>**

Topic	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including:	Existing Tipperary County Development Plan 2022-2028 measures, including:
<p><b>Various see below</b> –</p>	<p>Various – see below</p>	<p>Various, detailed zoning and development provisions, including those relating to sustainable and compact growth, sustainable mobility, flood risk, landscape, views and architectural heritage.</p> <p>Policy 1.1 Assess all new development proposals within the boundary of the Nenagh and Environs Local Area Plan 2024-2030 in accordance with the policies, objectives and requirements of the Tipperary County Development Plan 2022-2028 (and any review thereof), and this Plan. Where conflicts arise, the Tipperary County Development Plan 2022-2028 (and any review thereof) shall have primacy in decision-making<sup>58</sup>.</p> <p>Policy 2.4 Support compact residential growth in Nenagh through the sustainable intensification and consolidation of the town centre and established residential areas to meet identified housing targets and requirements in line with the Sustainable Residential Development and Compact Settlements Guidelines for Planning Authorities (DHLGH, 2024) and any review thereof.</p> <p>Policy 3.1 Support compact growth through:</p> <p>(a) the collaborative redevelopment and reuse of vacant and underused sites and areas in the 'Urban Core' and 'Compact Growth' area,</p> <p>(b) the development of sites identified through the URDF and RRDF; and</p> <p>(c) the redevelopment of Town Centre 'Regeneration Sites', 'Consolidation Sites' and areas zoned for 'Regeneration'.</p> <p>Policy 3.2 Support new development proposals for regeneration sites which accord with the Key Planning Criteria for these sites set out in Appendix 3: Regeneration Sites</p> <p>Objective 3A Support the Town Regeneration Officer and any future Town Team in the preparation and implementation of a collaborative Town Centre First Plan for Nenagh that will build on collaborate work and successful funding applications to date, and to provide a framework for which further funding will be sought.</p> <p>Objective 3B Support landowners with potential sites for regeneration and development through the Council's 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. as part of a Town Centre First programme.</p> <p>Objective 3C Offer support 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; and develop best practice guidance in the re-use of upper floors.</p> <p>Objective 3D Develop and improve areas in need of regeneration, renewal and redevelopment and to apply, where appropriate, the provisions of the Finance Act, Urban Regeneration and Housing Act, Derelict Sites Act, and use Compulsory Purchase Orders to enable regeneration, reduce vacancy, increase housing supply, employment opportunities and provide community facilities.</p> <p>Objective 3E Actively develop the Historical and Cultural Quarter, Rialto Cinema and Sustainable Energy Centre of Ireland (SECOE) projects, in consultation with the community and relevant stakeholders.</p> <p>Policy 5.1 Support new development and growth in the town and within the identified 'Neighbourhoods', in accordance with the principles for each 'Neighbourhood' as set out in Section 5.2.1, ensuring appropriate residential densities on central areas in accordance with the relevant s28 planning guidelines.</p>	<p>Chapter 9 under "Supporting Tourism product development"</p> <p>The Council will facilitate opportunities for harnessing the potential of scenic areas, trails, uplands, lakes and waterways in a manner that is compatible with the natural heritage and environment of the area.</p> <p>Development proposals outside of settlement centres, including those associated with agri-tourism and eco-tourism, wellness facilities, adventure sports, outdoor recreational installations and water-based tourism activities, (including water side interpretive/ activity centres and jetties), will be required to demonstrate a clear need to locate in the area, and to ensure that the development is compatible with the protection of the environment, including lakeshore and riparian habitats. Proposals for new tourism or recreation projects will be required to demonstrate adequate mitigation of potential environmental effects, including:</p> <ul style="list-style-type: none"> <li>• Management any increase in visitor numbers and/or any change in visitor behaviour, including through visitor/habitat management plans, in order to avoid significant effects including loss of habitat and disturbance; and</li> <li>• Ensuring provision of infrastructure with adequate capacity and performance.</li> </ul> <p>8 - J In conjunction with Coillte and other stakeholders to support the development of forestry resources with a number of functions including, flood retention, biodiversity, water quality/catchment management and tourism and recreation.</p> <p>8 - 3 In assessing applications for new development in the open-countryside, to facilitate the development of alternative farm enterprises, whilst balancing the need for a proposed rural based activity with the need to protect, promote and enhance the viability and environmental quality of the existing rural economy and agricultural land.</p> <p>8 - 6 Support new forestry plantation and works related to forestry including works relating to tree-felling, subject to the protection of visually sensitive areas, ecology (both terrestrial and aquatic), water resources and abstractions, and compliance with national regulations with respect to protection of the environment.</p> <p>8 - 7 Support the extraction of minerals and aggregates, and to have regard to;</p> <p>a) Quarries and Ancillary Activities, Guidelines for Planning Authorities, (DEHLG 2004), where such activities do not have a significant impact on the environment, landscape or residential amenities of the area.</p> <p>b) In considering new development, to have regard to potential adverse impacts on sites of geological importance or known high quality aggregate reserves as set out in the County Geological Sites record (and any review thereof) as maintained by the GSI.</p> <p>c) Where development proposals involve the redevelopment, rehabilitation or reuse of historic mining sites in the county, the Council may seek the preparation of a Master Plan for the entire landholding of the former mine to ensure the appropriate level of co-ordination of the entire landholding and protection of the environment.</p> <p>11 - A Support education and awareness programmes related to protection and promotion of the environment, biodiversity and our natural systems i.e. through membership of the All-Ireland Pollinators Plan, Tidy Towns, Green Schools etc.</p> <p>Chapter 12 under "Feasibility"</p> <p>New transport infrastructure projects, including greenways and blueways, that are not already provided for by existing plans/ programmes or are not already permitted, will be subject to feasibility assessment, considering need, environmental sensitivities as identified in the SEA Environmental Report, and objectives relating to sustainable mobility. Where feasibility is established, a Corridor and Route Selection Process will be undertaken, where appropriate, in two stages: Stage 1 – Route Corridor Identification, Evaluation and Selection; and Stage 2 – Route Identification, Evaluation and Selection.</p> <p>14 - 1 (a) Require new development proposals to incorporate a Green Infrastructure approach to the planning, design and management of built form/public realm and green and blue spaces, (where feasible), and to consider all opportunities for synergies and linkages with existing Blue and Green infrastructure in both urban and rural areas, in line with the Development Management Standards set out in Volume 3.</p> <p>(b) Ensure that proposals for greenway/blueway development contribute towards the protection or enhancement of existing green infrastructure and have regard to the "Connecting with nature for health and</p>

<sup>57</sup> Non-material changes to individual Local Area Plan provisions referenced in this report may be updated during the finalisation of the Local Area Plan, including numbering, formatting and graphic design.

<sup>58</sup> Provisions from the County Development Plan identified as mitigation in the SEA Environmental Report and Natura Impact Report shall apply regardless of whether the County Development Plan is varied and/or reviewed and/or expires.

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Topic	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including:	Existing Tipperary County Development Plan 2022-2028 measures, including:
		<p>Objective 10A Undertake a programme of monitoring and evaluation of the LAP over its lifetime in accordance with the monitoring framework, set out in Section 10.2 and in accordance with the methodology prepared for the TCDP 2022.</p> <p>Text from Section 6 “Transport and Connectivity”: The identification of transport infrastructure proposals in this Plan, including locations and any associated mapping, that is not already permitted or provided for by existing plans/programmes/etc. is non-binding and indicative.</p> <p>New transport infrastructure will be considered subject to environmental constraints, including those related to habitats and potential impacts (e.g. disturbance from lighting). This will include minimising river crossings, avoiding sensitive habitats, not increasing barriers to flood waters and sustainable design and construction techniques.</p> <p>As per Chapter 12 of the County Plan, new transport infrastructure projects contained within this Plan, including greenways and blueways, that are not already provided for by existing plans/programmes or are not already permitted, will be subject to feasibility assessment, considering need, environmental sensitivities and objectives relating to sustainable mobility. Where feasibility is established, a Corridor and Route Selection Process will be undertaken, where appropriate, in two stages: Stage 1 – Route Corridor Identification, Evaluation and Selection; and Stage 2 – Route Identification, Evaluation and Selection.</p> <p>By contributing towards a reduction in the use of the private car for trips, the Local Transport Plan provides for an overall reduction in the numbers of people exposed to pollution from emissions to air, including unacceptable noise levels from traffic, in particular within the town centre. The Area Based Transport Assessment has considered the potential for displacement of traffic to lead to localised potential impacts in terms of increased population exposure to air pollutants and/or elevated noise levels and identified that such impacts are unlikely to be significant. Proposed interventions shall ensure that they are consistent with all relevant legislative requirements.</p>	<p>wellbeing” EPA Research Report 2020 and the Development Management Standards 1.1 Habitats Directive Assessment and 1.2 Environmental Assessment.</p> <p>(c) Where new development is required to prepare a ‘Sustainability Statement’, they must demonstrate compliance with this policy to the satisfaction of the Council.</p> <p>16 - 1 Undertake a programme of monitoring and evaluation of the County Development Plan over its lifetime, as follows and to align these monitoring protocols with each other as part of an overall monitoring framework:</p> <p>a) Prepare a 2 Year Progress Report of the County Development Plan (as required under Section 15(2) of The Act), having consideration to any regional monitoring programme in place.</p> <p>b) Prepare a Report to the Regional Assembly setting out progress made in supporting objectives of the RSES (as required under Section 25A(1) of The Act).</p> <p>c) SEA Monitoring as detailed in the Environmental Report.</p>
<b>Biodiversity and flora and fauna</b>	<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</li> </ul>	<p>Also refer to measures under other environmental components including Soil, Water and Air and Climatic Factors and Landscape.</p> <p>Policy 3.6 Support new development which enhances the setting of Nenagh town centre, including its architectural and historical heritage and character, and facilitates compact growth, connectivity and active travel as opportunities arise.</p> <p>Policy 7.1 Protect and conserve the integrity and ecological and biodiversity value of the Nenagh and Ollatrim Rivers as they run 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>Policy 7.2 Support the development of a greenway along the Nenagh river, subject to planning, design and environment criteria and assessment</p> <p>Objective 7A Support and work with the local community, and other stakeholders in the development of blue and green infrastructure in the town, including the development of the Nenagh River Greenway, and in the enhancement of the biodiversity and conservation value of the river corridor.</p> <p>Objective 7B Work in partnership with stakeholders and the local community in the delivery of projects for Nenagh 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.</p>	<p>Also refer to measures under other environmental components including Soil, Water and Air and Climatic Factors and Landscape.</p> <p>Chapter 9 under “Supporting Tourism product development”</p> <p>The Council will facilitate opportunities for harnessing the potential of scenic areas, trails, uplands, lakes and waterways in a manner that is compatible with the natural heritage and environment of the area.</p> <p>Development proposals outside of settlement centres, including those associated with agri-tourism and eco-tourism, wellness facilities, adventure sports, outdoor recreational installations and water-based tourism activities, (including water side interpretive/ activity centres and jetties), will be required to demonstrate a clear need to locate in the area, and to ensure that the development is compatible with the protection of the environment, including lakeshore and riparian habitats. Proposals for new tourism or recreation projects will be required to demonstrate adequate mitigation of potential environmental effects, including:</p> <ul style="list-style-type: none"> <li>Management any increase in visitor numbers and/or any change in visitor behaviour, including through visitor/habitat management plans, in order to avoid significant effects including loss of habitat and disturbance; and</li> <li>Ensuring provision of infrastructure with adequate capacity and performance.</li> </ul> <p>Chapter 11.3 under “Conservation and Protection of Sites”</p> <p>The main threats and pressures on the natural environment including habitats and species, are from works associated with development including agriculture, forestry and fisheries, natural system modifications (including drainage), tourism, mining and quarrying (including peat extraction) and issues such as climate change, pollution, and invasive and problematic species. Habitat loss is also recognised as an ongoing pressure. Proposals for new development, will be required to demonstrate adequate mitigation of potential environmental effects, including ensuring provision of infrastructure with adequate capacity and performance. The Council in accordance with the Core Strategy objective of the Plan, will seek to ensure the protection the natural habitats and species as part of the management of new development and through its enforcement procedures.</p> <p>11 - 1 In assessing proposals for new development to balance the need for new development with the protection and enhancement of the natural environment and human health. In line with the provisions of Article 6(3) and Article 6 (4) of the Habitats Directive no plans, programmes, etc. or projects giving rise to</p>

Topic	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including:	Existing Tipperary County Development Plan 2022-2028 measures, including:
	<p>displacement of protected species such as birds and bats.</p>		<p>significant cumulative, direct, indirect or secondary impacts on European sites arising from their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted on the basis of this Plan (either individually or in combination with other plans, programmes, etc. or projects<sup>59</sup>).</p> <p>11 - 2 Ensure the protection, integrity and conservation of European Sites and Annex I and II species listed in EU Directives. Where it is determined that a development may individually, or cumulatively, impact on the integrity of European sites, the Council will require planning applications to be accompanied by a NIS in accordance with the Habitats Directive and transposing Regulations, 'Appropriate Assessment of Plans and Projects, Guidelines for Planning Authorities', (DEHLG 2009) or any amendment thereof and relevant EPA and European Commission guidance documents.</p> <p>11 - 3 Ensure the conservation and protection of existing, and proposed NHAs, and to ensure that proposed developments within or in close proximity to an existing or proposed NHA would not have a significant adverse impact on the status of the site as described.</p> <p>11 - 4 (a) Conserve, protect and enhance areas of local biodiversity value, habitats, ecosystems and ecological corridors, in both urban and rural areas, including rivers, lakes, streams and ponds, peatland and other wetland habitats, woodlands, hedgerows, tree lines, veteran trees, natural and semi-natural grasslands in accordance with the objectives of the National Biodiversity Plan (DCHG 2017) and any review thereof.</p> <p>(b) Safeguard, enhance and protect water bodies (rivers/canals/lakes) and river walks and to provide links, where possible, to wider Green Infrastructure networks as an essential part of the design process.</p> <p>(c) Require an 'Ecosystems Services' approach for new development to incorporate nature-based solutions, in so far as practical, as part of water management systems, public realm design and landscaping, in line with best practice.</p> <p>(d) Seek the retention of trees and hedgerows of particular local value, or where retention is not feasible, require their replacement, and seek a proactive focus on new tree-planting as part of new development.</p> <p>11 - 6 Ensure the integration of river corridors with green infrastructure in settlements in line with the 'Planning for Watercourses in the Urban Environment' (Inland Fisheries Ireland, 2020).</p> <p>11 - 8 Provide for the sustainable development of fisheries, in compliance with the Habitats and Birds Directives, and other ecological protection objectives. New infrastructure should be positioned at already modified locations where feasible; and sedimentation and siltation issues should be considered, with floating infrastructure used where feasible. Fishery related developments may necessitate the preparation of a Visitor/Habitat Management Plan that includes requirements in relation to: sustainable fishing practices that would not affect the ecological site integrity; and invasive species.</p> <p>11 - 12 Seek to control the spread of invasive plant and animal species, including consideration of potential pathways for invasive species spread, i.e. watercourses.</p> <p>11 - 14 Support the diversification of peatlands, whilst ensuring the protection of their ecological, archaeological, cultural and educational significance in line with the National Peatlands Strategy (DAHG 2015). The Council may request landowners to prepare a 'Peatland Master Plan', especially for areas of industrial cut-over peatland, and will work with all stakeholders involved in the process in this regard. Any Masterplan should identify any significant tourism, amenity and recreation potential of these lands.</p> <p>11 -18 Ensure that new development does not result in significant disturbance as a result of light pollution and to ensure that all new developments are designed and constructed to minimise the impact of light pollution on the visual, environmental and residential amenities of surrounding areas.</p> <p>11 - B Undertake a survey of non-designated wetlands as defined by the Ramsar Convention (2010) in the county over the lifetime of the County Development Plan.</p> <p>11 - C (a) Support and facilitate the implementation of the objectives of the Tipperary Heritage Plan 2017- 2021, and,</p> <p>(b) Prepare a 'Biodiversity and Heritage Plan' for County Tipperary over the lifetime of the County Development Plan.</p> <p>(a) Support the objectives of the All Ireland Pollinator Plan 2021-2025 by incorporating pollinator friendly native trees and plants within grass verges along public roads and existing and future</p>

<sup>59</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.  
CAAS for Tipperary County Council

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Topic	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including:	Existing Tipperary County Development Plan 2022-2028 measures, including:
			<p>greenways, new hedgerows, public parks and public open spaces in towns and villages, including part of mixed use and residential developments.</p> <p>(b) Prepare a 'Pollinator Action Plan' for County Tipperary over the lifetime of the County Development Plan, having consideration to the All-Ireland Pollinator Plan, 2021 -2025.</p> <p>11 - G Apply best practice in sustainable environmental standards in the design and development of collaborative and/or public sector development in Tipperary, including:</p> <p>(a) Ensure that biodiversity issues are considered at the earliest possible stages of plan making;</p> <p>(b) Ensure that plans and strategies comply with nature conservation legislation and policy as required (fulfil SEA and AA requirements); and</p> <p>(c) Carry out ecological impact assessment of plans and strategies as appropriate.</p>
<b>Population and human health</b>	<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>	<p>Also refer to measures under other environmental components including Soil, Water and Air and Climatic Factors.</p> <p>Policy 2.2 Support new development that will enable sustainable housing growth, employment, community development and prosperity for Nenagh as a Key Town in line with the Strategic Objectives of the TCDP.</p> <p>Policy 4.1 Support and direct new development proposals that generate high densities of employment towards lands zoned 'Urban Core', 'Mixed Use' and 'Regeneration'.</p>	<p>Also refer to measures under other environmental components including Soil, Water and Air and Climatic Factors.</p> <p>8 - 8 Implement the requirement of the Seveso III Directive, and any regulations giving effect to this Directive, with regard to the following:</p> <p>a) The siting of Major Accidents Sites;</p> <p>b) The modification of development on an existing, or within the vicinity of a Major Accident Hazard Site.</p> <p>11 - 1 In assessing proposals for new development to balance the need for new development with the protection and enhancement of the natural environment and human health. In line with the provisions of Article 6(3) and Article 6 (4) of the Habitats Directive no plans, programmes, etc. or projects giving rise to significant cumulative, direct, indirect or secondary impacts on European sites arising from their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted on the basis of this Plan (either individually or in combination with other plans, programmes, etc. or projects<sup>60</sup>).</p> <p>11 - 17 Ensure that new development does not result in significant noise disturbance and to ensure that all new developments are designed and constructed to minimise noise disturbance in accordance with the provisions of the Noise Action Plan 2018 and relevant standards and guidance that refer to noise management.</p> <p>11 -18 Ensure that new development does not result in significant disturbance as a result of light pollution and to ensure that all new developments are designed and constructed to minimise the impact of light pollution on the visual, environmental and residential amenities of surrounding areas.</p> <p>11 – H Apply the provisions of the Tipperary County Council Noise Action Plan 2018 – 2023 as it relates to Noise Action Areas in order to reduce disturbance from noise.</p>
<b>Soil</b>	<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>	<p>Also refer to measures under other environmental components including Water.</p> <p>Policy 2.1 Require the retrofitting of existing structures on brownfield sites, unless it demonstrated that retrofitting is unfeasible, or redevelopment of the site would provide positive carbon impact through the re-design, construction and use stages of a new building, compared with retrofitting.</p>	<p>Also refer to measures under other environmental components including Water.</p> <p>8 - 7 Support the extraction of minerals and aggregates, and to have regard to;</p> <p>a) Quarries and Ancillary Activities, Guidelines for Planning Authorities, (DEHLG 2004), where such activities do not have a significant impact on the environment, landscape or residential amenities of the area.</p> <p>b) In considering new development, to have regard to potential adverse impacts on sites of geological importance or known high quality aggregate reserves as set out in the County Geological Sites record (and any review thereof) as maintained by the GSI.</p> <p>c) Where development proposals involve the redevelopment, rehabilitation or reuse of historic mining sites in the county, the Council may seek the preparation of a Master Plan for the entire landholding of the former mine to ensure the appropriate level of co-ordination of the entire landholding and protection of the environment.</p> <p>11 - 11 In assessing proposals for new development to protect, support and conserve the geological heritage sites of Tipperary and their value as outlined in the Tipperary Audit of Geological Heritage Sites, (GSI/TCC, 2019).</p>

<sup>60</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.



SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Topic	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including:	Existing Tipperary County Development Plan 2022-2028 measures, including:
<p><b>Water</b></p>	<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>	<p>Also refer to measures under other environmental components including Soil and Material Assets.</p> <p>Policy 8.3 Require new development to ensure it 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> <p>Policy 8.4 Require that all development proposals in Nenagh integrate SUDS and nature-based solutions to SUDS as part of an overall sustainable urban drainage and urban greening approach (refer also to Section 3.5 of the accompanying SFRA, "Sustainable Urban Drainage Systems and Surface Water Guidance and Strategy"), unless they are demonstrated to be operationally unfeasible to the satisfaction of the Council.</p> <p>Policy 8.5 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> <p>a) 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.</p> <p>b) 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.</p> <p>c) 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.</p> <p>d) 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. Flood Risk Assessments shall apply the precautionary approach recommended in the Guidelines and shall be informed by the advice on the expected impacts of climate change and the allowances to be provided for future flood risk management provided in the OPW's (2019) Flood Risk Management Climate Change Sectoral Adaptation Plan and the guidance on potential future scenarios contained therein.</p> <p>e) 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. For the avoidance of doubt, the Office of Public Works' Preliminary Flood Risk Assessment indicative pluvial maps (2012) are not considered to be reliable for assessing pluvial risk.</p> <p>f) Any planning application within Defended Areas (refer to SFRA for more details) shall demonstrate that residual risks have been considered and include measures are for their management as appropriate.</p> <p>Objective 8B 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.</p> <p>Objective 8D Support and work in co-operation with the Office of Public Works in the design, development and implementation of the Nenagh Flood Relief Scheme.</p>	<p>Also refer to measures under other environmental components including Soil and Material Assets.</p> <p>11 - 5 Ensure that new developments proposed in or near 'Ground Water Protection Schemes' and 'Zones of Contribution' which contribute to public water supplies, do not result in a significant negative impact on the integrity, function and management of these important assets.</p> <p>11 - 6 Ensure the integration of river corridors with green infrastructure in settlements in line with the 'Planning for Watercourses in the Urban Environment' (Inland Fisheries Ireland, 2020).</p> <p>11 - 7 a) Ensure the protection of water quality in accordance with the EU WFD, and support the objectives and facilitate the implementation of the associated Programme of Measures of the River Basin Management Plan 2018-2021 and any successor. This includes contributing towards the protection of blue-dot catchments and drinking water resources. Also, have cognisance of the EU's Common Implementation Strategy Guidance Document No. 20 and 36 which provide guidance on exemptions to the environmental objectives of the WFD.</p> <p>b) Support an integrated, and collaborative approach to catchment management in accordance with the River Basin Management Plan 2018-2021 and any successor.</p> <p>c) Require an undisturbed edge or buffer zone to be maintained, where appropriate, between new developments and riparian zones of water bodies to maintain the natural function of existing ecosystems associated with water courses and their riparian zones, and to enable sustainable public access.</p> <p>11 - 9 Assess all new developments (both within and without designated Flood Risk Zones) in line with the 'Staged Approach' and pre-cautionary principle set out in the Planning System and Flood Risk Management Guidelines for Planning Authorities, (DEHLG, 2009) and any amendment thereof, and the following:</p> <p>(a) 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 OPW. 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.</p> <p>(b) SFRA's and site-specific flood risk assessments shall provide information on the implications of climate change with regard to flood risk in relevant locations. The 2009 OPW Draft Guidance on Assessment of Potential Future Scenarios for Flood Risk Management (or any superseding document) shall be consulted with to this effect.</p> <p>(c) Ensure each flood risk management activity is examined to determine actions required to embed and provide for effective climate change adaptation as set out in the OPW Climate Change Sectoral Adaptation Plan for Flood Risk Management applicable at the time.</p> <p>(d) Applications for development on land identified as 'benefitting land' may be prone to flooding, and as such site-specific flood risk assessments may be required in these areas.</p> <p>(e) Require applications for new development, or for an extension to an existing development on land zoned for 'Social and Public' or 'Amenity' use and where a potential flood risk is identified, and where the proposed use might be vulnerable, to be subject to site-specific flood risk assessment to the satisfaction of the Council.</p> <p>11 - 10 (a) Ensure that new developments proposed in Arterial Drainage Schemes and Drainage Districts do not result in a significant negative impact on the integrity, function and management of these areas.</p> <p>(b) Consult with the OPW in relation to proposed developments in the vicinity of Flood Relief Schemes and drainage channels and rivers for which the OPW are responsible, and to retain a strip on either side of such channels, where required, to facilitate maintenance access thereto.</p> <p>(c) Protect the integrity of any formal flood risk management infrastructure (see key flood risk infrastructure identified in Section 2.2 "Drainage, Key Flood Risk Infrastructure and Early Warning Systems" of the SFRA), thereby ensuring that any new development does not negatively impact any existing defence infrastructure or compromise any proposed new defence infrastructure</p> <p>11 - E Require an integrated, and collaborative approach to local catchment management to assist in the effective implementation of the RBMP (and any review thereof) and to support the activities LAWPRO in rolling out the local Authorities Waters Programme.</p> <p>11 - F (a) To support and facilitate the CFRAM Programme, and to support the OPW in the development and implementation of sustainable flood risk management plans and actions.</p> <p>(b) To consider, as appropriate any new and/or emerging data, including, when available, any relevant information contained in the CFRAM Flood Risk Management Plans.</p>

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Topic	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including:	Existing Tipperary County Development Plan 2022-2028 measures, including:
		<p>To also contribute towards the protection of key flood risk infrastructure, such as the embankment at Lisbunney Industrial Estate, from interference or removal. Text after Figure 11 of the LAP: Some lands zoned for 'New Residential' development within the plan fall within a flood zone but benefit from an extant planning permission. If amendments are required to this planning permission or a new planning permission is sought on these lands, the applicant will be required to re-examine the flood risk on the lands, and ensure best practices are provided for and a precautionary approach is taken, including re-designing elements of the proposal to provide open space where flood risk occurs on the lands. Text at the end of Section 8.5 of the LAP: New proposals for minor flood relief works are also being progressed in Nenagh to alleviate flood risk in the town. In consultation with the OPW, the Council will support the development of flood relief schemes in the town and will also contribute towards the protection of key flood risk infrastructure, including the Nenagh Flood Defence Scheme, from interference or removal.</p>	<p>11 - I Comply with the Arterial Drainage Act 1945 (as amended) prior to the carrying out of construction/ alteration works, or drainage works etc on water channels.</p>
<p><b>Air and Climatic Factors</b></p>	<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>	<p>Also refer to the overall approach to land use zoning and sustainable mobility provided by the Plan as well as other various climate action measures (see also Section 8.5 of this report). Policy 2.3 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 Tipperary County Council Climate Action Plan 2024-2029 (and any review thereof). Objective 2A 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, in accordance with the Tipperary County Council Climate Action Plan 2024-2029. 6.5 Safeguarding the Strategic Road Network It is a key aim of the Council to maintain and protect the safety, capacity and efficiency of national roads and associated junctions. Proposals for new development on or affecting national roads within the LAP area, including the implementation of specific objectives in the LAP and Sustainable Travel Plan, shall take account of the requirements of TII and the following publications: • DoECLG Spatial Planning and National Roads Guidelines 2012. • The Treatment of Transition Zones to Towns and Villages on National Roads' (TII Publications DN-GEO-03084) • Design Phase Procedure for Road Safety Improvement Schemes, Urban Renewal Schemes and Local Improvement Schemes (TII Publications DN-GEO-03030). • TII Traffic &amp; Transport Assessment Guidelines (2014) • Publications GE-STY-01024 Road Safety Audit Policy 6.1 Support new development that will improve accessibility and movement within Nenagh, 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 Support the implementation of the active travel and demand measures identified in the Local Transport Plan (Appendix 2) and require proposals for new development to compliment and demonstrate how they will integrate with the provisions of the Local Transport Plan. Policy 6.5 Require that new developments are designed to comply with Design Manual for Urban Roads and Streets (DoT, 2019) and supplementary Advice Notes including making provision for pedestrian and cycle infrastructure, enhancing connectivity and accessibility to the town and providing universal access (in particular for persons with disabilities, reduced mobility and older people) where a whole journey approach is considered. Policy 6.6 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</p>	<p>Also refer to the overall approach to land use zoning and sustainable mobility provided by the Plan as well as other various climate action measures (see also Section 8.5 of this report). 11 - 17 Ensure that new development does not result in significant noise disturbance and to ensure that all new developments are designed and constructed to minimise noise disturbance in accordance with the provisions of the Noise Action Plan 2018 and relevant standards and guidance that refer to noise management.</p>

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Topic	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including:	Existing Tipperary County Development Plan 2022-2028 measures, including:
		<p>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.</p> <p>Policy 6.7 Support the development of the following new inner relief roads:</p> <ul style="list-style-type: none"> <li>• the Thurles Road (R498) to the Dublin Road (R445);</li> <li>• the Dublin Road (R445) to the Borrisokane Road (N52); and</li> <li>• the Thurles Road (R445) to the Limerick Road (R445)</li> </ul> <p>Policy 6.8 Support the development of a multi-modal public transport hub at Nenagh Rail Station.</p> <p>Policy 6.9 Require new development proposals on or affecting national roads within the Plan area to have regard to national, regional and local policies and guidelines as set out in Section 6.8.</p> <p>Objective 6A Actively seek funding for investment in active travel and public transport in the town in line with the provisions of the LTP as outlined in Appendix 2 (and any review thereof).</p> <p>Objective 6B Seek to secure funding for the development of the following new inner relief roads:</p> <ul style="list-style-type: none"> <li>• the Thurles Road (R498) to the Dublin Road (R445);</li> <li>• the Dublin Road (R445) to the Borrisokane Road (N52); and</li> <li>• the Thurles Road (R445) to the Limerick Road (R445)</li> </ul> <p>Objective 6C 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.</p> <p>Objective 6D 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, and the provision of centrally located transport hub at the Rail Station.</p> <p>Objective 6E Achieve the modal shift target as set out in the LTP (Appendix 2) through collaboration with the community and transport sectors over the life time of this LAP.</p> <p>Objective 6G Seek opportunities to improve permeability in existing developed areas in accordance with NTA's Permeability Best Practice Guide, and where the opportunity exists, including those identified in the Local Transport Plan (Appendix 2), require that new development incorporates pedestrian and cycle routes to increase permeability for walking and cycling within the neighbourhoods identified in Figure 14 and the wider area. An evidence-based justification, to the satisfaction of the planning authority, must be provided with a planning application where the opportunity for increased permeability for the wider area exists but is not being delivered through the application site.</p>	
<b>Material Assets</b>	<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</li> </ul>	<p>Also refer to measures under other environmental components including Population and Human Health, Cultural Heritage, Soil, Water, Air, various Land Use and Phasing/Sequential Development provisions.</p> <p>Policy 8.1 Support the use of renewable energy technologies at appropriate scales in residential, commercial and community developments and support the principle of on-site energy generation for self-consumption.</p> <p>Policy 8.2 Support the sustainable and efficient use of existing capacity in water services, permit new connections to the Nenagh public and waste water supply and safeguard the integrity of the waste water network. Where local network upgrades are required, to ensure that capacity is provided to individual sites in accordance with the Uisce Éireann Connections Charging Policy and Uisce Éireann's Connections and Developer Service</p> <p>Policy 8.6 Support the upgrade of the Nenagh Waste Water Treatment Plant and new development proposals to safeguard the strategic function of the plant.</p> <p>Objective 8A Continually progress, in conjunction with Uisce Éireann, water supply and sewer rehabilitation activities, extension of the municipal waste water network,</p>	<p>Also refer to measures under other environmental components including Population and Human Health, Cultural Heritage, Soil, Water, Air, various Land Use and Phasing/Sequential Development provisions.</p> <p>8- 3 In assessing applications for new development in the open-countryside, to facilitate the development of alternative farm enterprises, whilst balancing the need for a proposed rural based activity with the need to protect, promote and enhance the viability and environmental quality of the existing rural economy and agricultural land.</p> <p>8 - 6 Support new forestry plantation and works related to forestry, subject to the protection of visually sensitive areas, ecology (both terrestrial and aquatic), water resources and abstractions, and compliance with national regulations with respect to protection of the environment.</p> <p>8 - 7 Support the extraction of minerals and aggregates, and to have regard to;</p> <p>a) Quarries and Ancillary Activities, Guidelines for Planning Authorities, (DEHLG 2004), where such activities do not have a significant impact on the environment, landscape or residential amenities of the area.</p> <p>b) In considering new development, to have regard to potential adverse impacts on sites of geological importance or known high quality aggregate reserves as set out in the County Geological Sites record (and any review thereof) as maintained by the GSI.</p>

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Topic	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including:	Existing Tipperary County Development Plan 2022-2028 measures, including:
	<p>mitigation of potential conflicts).</p> <ul style="list-style-type: none"> <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>	<p>capital maintenance activities, and to continue to monitor the performance of the networks to ensure that the most urgent works are prioritised as required.</p> <p>Objective 8C Support the sustainable management of waste and enable a significant reduction in the production of waste in Nenagh, in line with the principles of the Waste Action Plan for a Circular Economy (DECC, 2021).</p>	<p>Chapter 9 under "Supporting Tourism product development"</p> <p>The Council will facilitate opportunities for harnessing the potential of scenic areas, trails, uplands, lakes and waterways in a manner that is compatible with the natural heritage and environment of the area.</p> <p>Development proposals outside of settlement centres, including those associated with agri-tourism and eco-tourism, wellness facilities, adventure sports, outdoor recreational installations and water-based tourism activities, (including water side interpretive/ activity centres and jetties), will be required to demonstrate a clear need to locate in the area, and to ensure that the development is compatible with the protection of the environment, including lakeshore and riparian habitats. Proposals for new tourism or recreation projects will be required to demonstrate adequate mitigation of potential environmental effects, including:</p> <ul style="list-style-type: none"> <li>Management any increase in visitor numbers and/or any change in visitor behaviour, including through visitor/habitat management plans, in order to avoid significant effects including loss of habitat and disturbance; and</li> <li>Ensuring provision of infrastructure with adequate capacity and performance.</li> </ul> <p>10 - 1 Support and facilitate new development that will produce energy from local renewable sources such as hydro, bio-energy, wind, solar, geothermal and landfill gas, including renewable and non-renewable enabling plant, subject to compliance with normal planning and environmental criteria, in co-operation with statutory and other energy providers. The provisions of the Tipperary Renewable Energy Strategy (and any review thereof) as set out in Volume 3, will apply to new development.</p> <p>a) Quarries and Ancillary Activities, Guidelines for Planning Authorities, (DEHLG 2004), where such activities do not have a significant impact on the environment, landscape or residential amenities of the area.</p> <p>b) In considering new development, to have regard to potential adverse impacts on sites of geological importance as set out in the County Geological Sites record (and any review thereof) as maintained by the GSI.</p> <p>11 - 5 Ensure that new developments proposed in or near 'Ground Water Protection Schemes' and 'Zones of Contribution' which contribute to public water supplies, do not result in a significant negative impact on the integrity, function and management of these important assets.</p> <p>11 - 13 Ensure that proposals for agricultural developments, as appropriate, comply with the European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2010 or any amendment thereof.</p> <p>15 - 1 Implement the provisions of the Water Services Guidelines for Planning Authorities (DHLGH, 2018) (and any amendment) in assessing applications for new development.</p> <p>15 - 2 Require that all new septic tanks, proprietary effluent treatment systems and percolation areas to be located and constructed in accordance with the Water Services Guidelines for Planning Authorities (and any review thereof) and the Code of Practice for Domestic waste water treatment systems (EPA, 2021) (and any amendment) and the development management standards of this Plan as set out in Volume 3.</p> <p>15 - 3 In line with the provisions of Section 5.3.1 of the Draft Water Services Guidelines for Planning Authorities (or any review thereof) new development will connect to existing water infrastructure, where capacity exists, in order to maximise the use of existing infrastructure and reduce additional investment costs. There is a general presumption that development will be focused into areas that are serviced by public water supply and wastewater collection network.</p> <p>In settlement centres where, municipal treatment plants do not have the capacity to cater for additional development, the Council will facilitate development, where the developer has agreed proposals for the upgrade of the treatment plant and/or network, as may be necessary, with Irish Water in accordance with the Draft Water Services Guidelines for Planning Authorities and any amendment thereof and the Irish Water Connection Charges Policy. The Council will require that such infrastructure is in place, prior to the commencement of the development.</p> <p>15 - 4 Require development proposals to connect to the public water supply, where such facilities are available.</p> <p>15 - 5 Require all new development to provide a separate foul and surface water management system and to incorporate water sensitive urban design, where appropriate, in new development and the public realm. New developments or retrofit/upgrading works, including those contributing to combined drainage systems where streetscape enhancement programmes or resurfacing programmes are planned, will incorporate measures to reduce the generation of storm water run-off, and to ensure that all storm water generated is managed on-site, or is attenuated and treated prior to discharge to an approved storm water system, with consideration to the following:</p>

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Topic	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including:	Existing Tipperary County Development Plan 2022-2028 measures, including:
			<p>(a) Nature-Based Solutions to the Management of Rainwater and Surface Water Runoff in Urban Areas (water sensitive urban design) Best Practice Interim Guidance Document (DHLGH, 2001) and any review there off,</p> <p>(b) The infiltration into the ground through the development of porous pavement such as permeable paving, swales and detention basis,</p> <p>(c) The holding of water in storage areas through the construction of green roofs, rainwater harvesting, detention basis, ponds and wetlands etc.</p> <p>(d) The slow-down in the movement of water.</p> <p>15-6 Require all new development to provide a separate foul and surface water management system and to incorporate water sensitive urban design, where appropriate, in new development and the public realm. New developments or retrofit/upgrading works, including those contributing to combined drainage systems where streetscape enhancement programmes or resurfacing programmes are planned, will incorporate measures to reduce the generation of storm water run-off, and to ensure that all storm water generated is managed on-site, or is attenuated and treated prior to discharge to an approved storm water system, with consideration to the following:</p> <p>(a) Nature-Based Solutions to the Management of Rainwater and Surface Water Runoff in Urban Areas (water sensitive urban design) Best Practice Interim Guidance Document (DHLGH, 2001) and any review there off,</p> <p>(b) The infiltration into the ground through the development of porous pavement such as permeable paving, swales and detention basis,</p> <p>(c) The holding of water in storage areas through the construction of green roofs, rainwater harvesting, detention basis, ponds and wetlands etc.</p> <p>(d) The slow-down in the movement of water.</p> <p>15 - A Work in partnership with Irish Water in the performance of its functions and in the implementation of the WSSP, Investment Plan and NWRP (and any amendment thereof), to ensure that water infrastructure complies with appropriate regulations and to ensure and support the sustainable development of the county.</p> <p>15 - B Provide additional and improved surface water networks to both reduce pollution and support sustainable development.</p> <p>15 - C Carry out on-going monitoring and registration of private septic tanks in the County in line with the EPAs National Inspection Plan.</p> <p>15 - D Support the sustainable development, maintenance and upgrading of electricity and gas infrastructure, by network providers, to enable the integration of renewable energy sources and enable an energy system that is safe, secure and adaptable.</p>
<p><b>Cultural Heritage</b></p>	<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>	<p>Policy 3.6 Support new development which enhances the setting of Nenagh town centre, including its architectural and historical heritage and character, and facilitates compact growth, connectivity and active travel as opportunities arise.</p> <p>Policy 3.7 Require traditional shopfronts to be retained or refurbished, in accordance with the requirements of Policy 13-2 of the TCDP and Chapter 12 of the Architectural Heritage Protection – Guidelines for Planning Authorities (2011).</p> <p>Policy 7.3 a) Support the retention of trees of significant amenity value and require public realm proposals to include for urban greening that is appropriate to the character of the area, provides for urban shading, supports biodiversity and provides an appropriate visual setting.</p> <p>b) Support the removal of mature trees, or trees of significant amenity value, only where it can be demonstrated that the loss of the tree(s) is outweighed by the wider public benefits of the proposal.</p> <p>c) Require development proposals which affect trees of significant amenity value to identify trees to be retained, and methods for the protection of those trees to be retained during and post-construction to be set out within development proposals.</p> <p>d) Require new development proposals to incorporate the provision of trees, in accordance with the requirements of Section 3.7 of the Development Management standards of the TCDP.</p> <p>Policy 7.4 Safeguard the setting and character of Nenagh Castle, including the castle field and gardens.</p>	<p>11 - C (a) Support and facilitate the implementation of the objectives of the Tipperary Heritage Plan 2017- 2021, and,</p> <p>(b) Prepare a 'Biodiversity and Heritage Plan' for County Tipperary over the lifetime of the County Development Plan.</p> <p>13 - 1 Encourage and support the sympathetic restoration, re-use and maintenance of protected structures thereby ensuring their conservation and protection. In considering proposals for development, the Council will have regard to the Architectural Heritage Protection Guidelines for Planning Authorities, (DAHG 2011) or any amendment thereof, and proposals that will have an unacceptable impact on the character and integrity of a protected structure or adjoining protected structure will not be permitted.</p> <p>13 - 2 Encourage and support the enhancement and management of Architectural Conservation Areas with regard to;</p> <p>a) The impact of development on the character, appearance and integrity of the Architectural Conservation Area in terms of compatibility in design, colour, finishes and massing of form;</p> <p>b) The impact of development on the existing amenities, character and heritage of the area;</p> <p>c) The need to retain important architectural and townscape elements such as shopfronts, sash windows, gutters and down pipes, plasterwork, etc</p> <p>d) The relevant Architectural Conservation Area Statement of Character, as set out in Volume 3.</p> <p>13 - 3 Seek the sympathetic restoration, appropriate re-use and maintenance of buildings/features which are considered to be of local and vernacular architectural importance.</p> <p>13 - 4 Safeguard sites, features and objects of archaeological interest, including Recorded monuments, National Monuments and Monuments on the Register of Historic Monuments, and archaeological remains found within Zones of Archaeological Potential located in historic towns and other urban and rural areas. In safeguarding such features of archaeological interest, the Council will seek to secure the preservation (i.e.</p>

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Topic	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including:	Existing Tipperary County Development Plan 2022-2028 measures, including:
		<p>Policy 7.5 Require new development proposals to have regard to the architectural character and special value of the Nenagh ACA, in accordance with the Architectural Heritage Protection, Guidelines for Planning Authorities (DEHLG, 2011).</p> <p>Policy 7.6 Require that the views and streetscapes as listed in Section 7.2.4 shall be given due consideration as part of the design process for new development to the satisfaction of the Council. A Heritage Impact Assessment (HIA) or Landscape Value and Impact Assessment (LVIA) may be required to demonstrate development proposals accord with this policy.</p>	<p>preservation in situ or in exceptional circumstances preservation by record) and will have regard to the advice and recommendation of the DAHG.</p> <p>Where developments, due to their location, size or nature, may have implications for archaeological heritage, the Council may require archaeological assessment to be carried out. This may include for a requirement for a detailed Visual Impact Assessment of the proposal and how it will impact on the character or setting of adjoining archaeological features. Such developments include those that are located at, or close to an archaeological monument or site, those that are extensive in terms of area (1/2 ha or more) or length (1 kilometre or more), those that may impact on the underwater environment and developments requiring EIA.</p> <p>13 - 5 Respect and preserve the remains (both sub-surface and upstanding) of the medieval towns in line with the Conservation, Management and Interoperation Plans in place for each town, in line with the guidance of the Heritage Council and the National Policy on Town Defences (DEHLG, 2008).</p> <p>13 - 6 Consider landscapes of archaeological significance and, if considered necessary, require an impact assessment for proposed development which could have a significant impact on the identified landscape.</p> <p>13 - 7 Consider underwater archaeology and ensure that development to river banks edges within the vicinity of a site of archaeological interest shall not be detrimental to the character of the archaeological site or its setting.</p> <p>13 - A Support the owners of Protected Structures and structures in Architectural Conservation Areas through educational and information actions to assist in the conservation and active use of built heritage.</p> <p>13 - B Administer and manage built heritage funding schemes such as the 'Built Heritage Investment Scheme', 'Structures at Risk Scheme' etc and any review thereof, to support owners of built heritage in the county.</p> <p>13 - D Carry out an audit of archaeological landscapes in Tipperary over the lifetime of the County Development Plan, having consideration to landscapes that may extend into adjoining counties.</p> <p>13 - E Work closely with the relevant State bodies, ICOMOS, UNESCO, the relevant local authorities and local stakeholders to support the designation of the Royal Sites as a UNESCO World Heritage Site.</p> <p>13 -F Safeguard archaeological artefacts found on land or in rivers and, as appropriate, to file a 'Report of Discovery' with the National Museum of Ireland under Section 68 (2) of the National Cultural Institutions Act, 1997.</p>
<b>Landscape</b>	<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>	<p>Also refer to measures under Biodiversity and Flora and Fauna and Cultural Heritage.</p> <p>Policy 7.6 Require that the views and streetscapes as listed in Section 7.2.4 shall be given due consideration as part of the design process for new development to the satisfaction of the Council. A Heritage Impact Assessment (HIA) or Landscape Value and Impact Assessment (LVIA) may be required to demonstrate development proposals accord with this policy.</p> <p>7.2.4 Views/Streetscapes/ Landscapes as part of new development</p> <p>The consolidation and revitalisation of the compact growth area is a key focus of this LAP. However, new development should have consideration to how it can integrate with the built fabric of the town. The following views and streetscapes are particularly important and should be given due consideration as part of the design process for new development:</p> <ol style="list-style-type: none"> <li>1) Views into and out of the ACAs.</li> <li>2) Views from Emmett Place, Dublin Road, O'Rahilly Street, Drommin Road, Ashe Road and Summerhill towards Nenagh Castle</li> <li>3) Views towards the steeple of St Mary's Church</li> <li>4) View from O'Rahilly Street towards Rialto Cinema and Garda Station</li> <li>5) Views from Ashe Road, Emmett Place, O'Rahilly Street and Kickham Street towards Nenagh Courthouse</li> <li>6) View from Tyone towards Kenyon Street</li> <li>7) View from Kenyon Street southwards towards Silvermine / Keeper Mountain range</li> <li>8) Views of Friar Street, Abbey Street, Well Road and Martyr's Road towards the Franciscan Friary</li> <li>9) Views from Mitchell Street, Kenyon Street, Pound Street and Pearse Street towards Market Square</li> </ol>	<p>Also refer to measures under Biodiversity and Flora and Fauna and Cultural Heritage.</p> <p>11 - 15 Facilitate new development which integrates and respects the character, sensitivity and value of the landscape in accordance with the designations of the LCA, and the schedule of Views and Scenic Routes (or any review thereof). Developments which would have a significant adverse material impact on visual amenities will not be supported.</p> <p>11 - 16 Ensure the protection of the visual amenity, landscape quality and character of designated Primary and Secondary Amenity Areas. Developments which would have a significant adverse material impact on the visual amenities of the area will not be supported. New development shall have regard to the following:</p> <ol style="list-style-type: none"> <li>a) Developments should avoid visually prominent locations and be designed to use existing topography to minimise adverse visual impact on the character of primary and secondary amenity areas.</li> <li>b) Buildings and structures shall integrate with the landscape through careful use of scale, form and finishes.</li> <li>c) Existing landscape features, including trees, hedgerows and distinctive boundary treatment shall be protected and integrated into the design proposal.</li> </ol> <p>11 -18 Ensure that new development does not result in significant disturbance as a result of light pollution and to ensure that all new developments are designed and constructed to minimise the impact of light pollution on the visual, environmental and residential amenities of surrounding areas.</p> <p>13 - 4 Safeguard sites, features and objects of archaeological interest, including Recorded monuments, National Monuments and Monuments on the Register of Historic Monuments, and archaeological remains found within Zones of Archaeological Potential located in historic towns and other urban and rural areas. In safeguarding such features of archaeological interest, the Council will seek to secure the preservation (i.e. preservation in situ or in exceptional circumstances preservation by record) and will have regard to the advice and recommendation of the DAHG.</p> <p>Where developments, due to their location, size or nature, may have implications for archaeological heritage, the Council may require archaeological assessment to be carried out. This may include for a requirement for a detailed Visual Impact Assessment of the proposal and how it will impact on the character or setting of adjoining archaeological features. Such developments include those that are located at, or close to an</p>

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Topic	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including:	Existing Tipperary County Development Plan 2022-2028 measures, including:
			archaeological monument or site, those that are extensive in terms of area (1/2 ha or more) or length (1 kilometre or more), those that may impact on the underwater environment and developments requiring EIA. 13 - E Work closely with the relevant State bodies, ICOMOS, UNESCO, the relevant local authorities and local stakeholders to support the designation of the Royal Sites as a UNESCO World Heritage Site.

## 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 can be considered and used as appropriate when it comes to monitoring the likely significant effects of implementing the Plan. The measures may be updated over time, as new requirements and information emerge, for example.

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. Indicators are accompanied by targets which are identified with regard to the relevant strategic actions.

Given the position of the Local Area Plan in the land use planning hierarchy beneath the Tipperary County Development Plan 2022-2028, the measures identified in that County Development Plan SEA have been used as they are or having been slightly modified – in most instances. This consistency across the hierarchy of land use plans will improve the efficiency and effectiveness of future monitoring.

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

Monitoring is an ongoing process and the programme allows for flexibility and the further refinement of indicators and targets. The Monitoring Programme may be updated to deal with specific environmental issues – including unforeseen effects – as they arise.

### 10.3 Sources

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

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

Sources for indicators may include existing monitoring databases (including those maintained by planning authorities 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).

Internal monitoring of the environmental effects of grants of permission in the Council would provide monitoring of certain indicators on a *grant of permission*<sup>61</sup> basis. Where significant adverse effects as a result of the development to be permitted are identified, such effects could be identified, recorded and used to inform monitoring evaluation.

<sup>61</sup> The likely significant effects of development proposals on environmental sensitivities are further determined during the development management process. Documenting any identified effects as a result of a development to be permitted can help to fulfill monitoring requirements.



## 10.4 Reporting

A stand-alone Monitoring Report on the significant environmental effects of implementing the Plan will be prepared in advance of the beginning of the review of the Plan. Monitoring frequencies of indicators tend to change although where they are consistent frequencies are identified. The measures set out on Table 10.1 can be considered and used as appropriate when it comes to monitoring the likely significant effects of implementing the Plan. The indicators may be updated over time, as new requirements and information emerge, for example.

The methodology for monitoring set out below will be undertaken by the Council. Where monitoring beyond existing sources is to be undertaken, it is recommended that industry standard methods are used where they exist and where appropriate.

Reporting may be undertaken in conjunction with the monitoring reporting on other plans, such as the County Development Plan and other Local Area Plans.

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

**Table 10.1 Indicators, Targets, Sources and Remedial Action<sup>62</sup>**

Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action
<b>Biodiversity, Flora and Fauna</b>	BFF	<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>DHLGH report of the implementation of the measures contained in the Habitats Directive - as required by Article 17 of the Directive (every 6 years)<sup>63</sup></li> <li>DHLGH National Birds Directive Monitoring Report for the under Article 12 (every 6 years)<sup>64</sup></li> <li>Consultations with the NPWS (see Section 10.4)<sup>65</sup></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 DHLGH 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>
		<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 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>Internal review of local land use plans</li> </ul>	<ul style="list-style-type: none"> <li>Review internal systems</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>Internal monitoring of preparation of local land use plans</li> </ul>	<ul style="list-style-type: none"> <li>Review internal systems</li> </ul>
		<ul style="list-style-type: none"> <li>Status of water quality in the County'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>Included under Water below</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 fauna – from County Development Plan and Local Area Plan</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 – from County Development Plan and Local Area Plan</li> </ul>	<ul style="list-style-type: none"> <li>Internal monitoring of likely significant environmental effects of grants of permission<sup>66</sup></li> </ul>	<ul style="list-style-type: none"> <li>Review internal systems</li> </ul>

<sup>62</sup> Indicators are linked to and should be considered alongside the environmental effects outlined in Table 8.3 and proposed mitigation measures outlined in Table 9.1.

<sup>63</sup> Including confirmation with development management that the following impacts have been considered and including use of monitoring data, where available: biodiversity/habitat loss; nitrogen deposition impacts on Natura 2000 sites; recreational disturbance resulting from implementation of tourism and recreation policies and objectives particularly in riparian areas; biodiversity enhancement; and disturbance /visitor pressure impacts of recreation, amenity and tourism development.

<sup>64</sup> Including confirmation with development management that the following impacts have been considered and including use of monitoring data, where available: biodiversity/habitat loss; nitrogen deposition impacts on Natura 2000 sites; recreational disturbance resulting from implementation of tourism and recreation policies and objectives particularly in riparian areas; biodiversity enhancement; and disturbance /visitor pressure impacts of recreation, amenity and tourism development.

<sup>65</sup> Including confirmation with development management that the following impacts have been considered and including use of monitoring data, where available: biodiversity/habitat loss; nitrogen deposition impacts on Natura 2000 sites; recreational disturbance resulting from implementation of tourism and recreation policies and objectives particularly in riparian areas; biodiversity enhancement; and disturbance /visitor pressure impacts of recreation, amenity and tourism development.

<sup>66</sup> Including confirmation with development management that the following impacts have been considered and including use of monitoring data, where available: biodiversity/habitat loss; nitrogen deposition impacts on Natura 2000 sites; recreational disturbance resulting from implementation of tourism and recreation policies and objectives particularly in riparian areas; biodiversity enhancement; and disturbance /visitor pressure impacts of recreation, amenity and tourism development.

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action
<b>Population and Human Health</b>	PHH	<ul style="list-style-type: none"> <li>Implementation of Plan measures relating to the promotion of economic growth as provided for by County Development Plan and Local Area Plan</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 County Development Plan and Local Area Plan</li> <li>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 review of progress on implementing Plan objectives</li> <li>Consultations with DECC (see Section 10.4)</li> </ul>	<ul style="list-style-type: none"> <li>Review internal systems</li> <li>Consultations with DECC</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>Consultations with the Health Service Executive and EPA</li> </ul>	<ul style="list-style-type: none"> <li>Consultations with the Health Service Executive and EPA</li> </ul>
		<ul style="list-style-type: none"> <li>Proportion of people reporting regular cycling / walking to school and work above previous 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 previous CSO figures</li> </ul>	<ul style="list-style-type: none"> <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 proportion of population shows increase in private car use above previous CSO figures, the Council will coordinate with the Regional Assembly, the DHLGH, DECC and NTA to develop a tailored response.</li> </ul>
		<ul style="list-style-type: none"> <li>Number of spatial plans 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>	<ul style="list-style-type: none"> <li>Internal review of local land use plans</li> </ul>	<ul style="list-style-type: none"> <li>Review internal systems</li> </ul>
<b>Soil (and Land)</b>	S	<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 and infill land parcels across the Plan area's existing built-up footprint</li> </ul>	<ul style="list-style-type: none"> <li>EPA Geoportal</li> <li>Compilation of greenfield and brownfield development for the DHLGH</li> <li>AA/Screening for AA for each application</li> </ul>	<ul style="list-style-type: none"> <li>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.</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>Internal review of grants of permission where contaminated material must be disposed of</li> </ul>	<ul style="list-style-type: none"> <li>Consultations with the EPA and Development Management</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>	<ul style="list-style-type: none"> <li>Internal monitoring of grants of permission</li> </ul>	<ul style="list-style-type: none"> <li>Review internal systems</li> </ul>

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action
<b>Water</b>	<b>W</b>	<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</li> </ul>	<ul style="list-style-type: none"> <li>EPA Monitoring Programme for WFD compliance<sup>67</sup></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> </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>	<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 planning applications are being permitted on flood zones, the Council will ensure that such grants are in compliance with the Flood Risk Management Guidelines and include appropriate flood risk mitigation and management measures.</li> </ul>
<b>Material Assets</b>	<b>MA</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> </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> <li>See also targets relating to greenfield and brownfield development of land under Soil and broadband under Population and Human Health</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> </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> </ul>
		<ul style="list-style-type: none"> <li>Proportion of people reporting regular cycling / walking to school and work above previous 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 previous CSO figures</li> </ul>	<ul style="list-style-type: none"> <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 proportion of population shows increase in private car use above previous CSO figures, the Council will coordinate with the Regional Assembly, the DHLGH, DECC and NTA to develop a tailored response.</li> </ul>

<sup>67</sup> Including monitoring of water quality and nitrogen deposition due to bioenergy and agricultural projects where available.

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action
<b>Air</b>	A	<ul style="list-style-type: none"> <li>Proportion of journeys made by private fossil fuel-based car compared to previous National Travel Survey levels</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 previous 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 previous CSO 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>68</sup>	C	<ul style="list-style-type: none"> <li>Implementation of County Development Plan and Local Area Plan measures relating to climate reduction targets</li> </ul>	<ul style="list-style-type: none"> <li>For review of progress on implementing County Development Plan and Local Area Plan objectives to demonstrate successful implementation of measures relating to climate reduction targets, including renewable energy production</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>Review internal systems</li> </ul>
		<ul style="list-style-type: none"> <li>A competitive, low-carbon, climate-resilient and environmentally sustainable economy</li> </ul>	<ul style="list-style-type: none"> <li>Contribute towards transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050</li> </ul>	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <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> </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 reduction targets of 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>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 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> </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 previous levels</li> </ul>	<ul style="list-style-type: none"> <li>Decrease in the proportion of journeys made by residents of the County using private fossil fuel-based car compared to previous levels</li> </ul>		
		<ul style="list-style-type: none"> <li>Proportion of people reporting regular cycling / walking to school and work above previous 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 previous CSO figures</li> </ul>	<ul style="list-style-type: none"> <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 proportion of population shows increase in private car use above previous CSO figures, the Council will coordinate with the Regional Assembly, the DHLGH, DECC and NTA to develop a tailored response.</li> </ul>

<sup>68</sup> Please also refer to relevant legislation and requirements under Section 4.10, Section 8.7 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.

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action
<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> </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>Internal monitoring of likely significant environmental effects of grants of permission</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>
		<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>	<ul style="list-style-type: none"> <li>Consultation with DHLGH (see Section 10.4).</li> </ul>	
<b>Landscape</b>	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 and Other Policies, Plans and Programmes

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

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
<b>European Level</b>			
<b>SEA Directive (2001/42/EC)</b>	<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.
<b>EIA Directive (2011/92/EU as amended by 2014/52/EU)</b>	<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.
<b>Habitats Directive (92/43/EEC)</b>	<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.
<b>Birds Directive (2009/147/EC)</b>	<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> </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> </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

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	<ul style="list-style-type: none"> <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>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>	<p>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><b>EU Nitrates Directive (91/676/EC)</b></p>	<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>	<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><b>EU Integrated Pollution Prevention Control Directive (2008/1/EC)</b></p>	<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>
<p><b>EU Plant Protection (products) Directive 2009/127/EC</b></p>	<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>
<p><b>EU Renewables Directive (2009/28/EC)</b></p>	<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>
<p><b>Indirect Land Use Change Directive (2012/0288(COD))</b></p>	<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</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> </ul>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in</p>



SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	<p>sources in all forms of transport in 2020 is at least 10 % of their final energy consumption.</p> <ul style="list-style-type: none"> <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>Improve the greenhouse gas performance of biofuel production processes (reducing associated emissions) by raising the greenhouse gas saving threshold for new installations subject to protecting installations already in operation on 1st July 2014;</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>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>
<b>Alternative Fuels Infrastructure Directive (2014/94/EU)</b>	<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>
<b>EU Energy Efficiency Directive (2012/27/EU)</b>	<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> <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>	<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>
<b>EU Seveso Directive (2012/18/EU)</b>	<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>	<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>
<b>Biodiversity Strategy for 2030 - Bringing nature back into our lives (European Commission, 2020)</b>	<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</li> </ul>	<p>The Strategy contains specific commitments and actions to be delivered by 2030, including:</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-</p>

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	<p>Europe's biodiversity on a path to recovery by 2030, and contains specific actions and commitments.</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>	<p>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>
<b>EU Green Infrastructure Strategy</b>	<p>Aims to create a robust enabling framework in order to promote and facilitate Green Infrastructure (GI) projects.</p>	<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>	<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>
<b>UN Kyoto Protocol (2<sup>nd</sup> Kyoto Period), the Second European Climate Change Programme (ECCP II), Paris climate conference (COP21) 2015 (Paris Agreement)</b>	<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 complement 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>	<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>
<b>EU 2020 Climate and Energy Package</b>	<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>	<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>
<b>EU 2030 Framework for Climate and Energy</b>	<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> </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</p>

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
<p><b>The Clean Air for Europe Directive (2008/50/EC) (EU Air Framework Directive)</b></p> <p><b>Fourth Daughter Directive (2004/107/EC)</b></p>	<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>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> <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>	<p>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>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><b>Noise Directive (2002/49/EC)</b></p>	<p>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>	<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>	<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><b>Floods Directive (2007/60/EC)</b></p>	<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>	<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><b>Water Framework Directive (2000/60/EC)</b></p>	<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> </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 basin 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>	<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>

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	<ul style="list-style-type: none"> <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>		
<b>Groundwater Directive (2006/118/EC)</b>	<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>	<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>
<b>Drinking Water Directive (98/83/EC)</b>	<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>	<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>
<b>Urban Waste Water Treatment Directive (91/271/EEC)</b>	<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>	<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>
<b>Environmental Liability Directive (2004/35/EC) as amended by Directive 2006/21/EC, Directive 2009/31/EC and Directive 2013/30/EU</b>	<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> </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</p>

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		<ul style="list-style-type: none"> <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> <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>	<p>– 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><b>European Convention on the Protection of the Archaeological Heritage (Valletta 1992)</b></p>	<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>	<p>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.</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><b>Convention of the Protection of the Architectural Heritage of Europe (Granada 1995)</b></p>	<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>	<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><b>Council of Europe Framework Convention on the Value of Cultural Heritage for Society (Faro 2005)</b></p>	<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>	<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>

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
<b>European Landscape Convention 2000</b>	<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.
<b>The Seventh Environmental Action Programme (EAP) of the European Community (2013-2020)</b>	<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> <li>to safeguard the Union's citizens from environment-related pressures and risks to health and wellbeing</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> <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>	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.
<b>Bern Convention (Convention on the Conservation of European Wildlife and Natural Habitats)</b>	<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 Caucus.</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.
<b>Bali Road Map (2007)</b>	<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.
<b>Cancun Agreements (2010)</b>	<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> </ul>	<p>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.</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

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	<ul style="list-style-type: none"> <li>Adaptation</li> <li>Forests</li> <li>Capacity building</li> </ul>		align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
<b>Doha Climate Gateway (2012)</b>	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.
<b>EU Common Agricultural Policy</b>	<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.
<b>EU REACH Regulation (EC 1907/2006)</b>	<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.
<b>Stockholm Convention</b>	<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 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>Other provisions of the Convention relate to the development of implementation plans, information exchange, public information, awareness and education, research, development and monitoring, technical assistance, financial resources and mechanisms, reporting, effectiveness evaluation and non-compliance</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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.
<b>Ramsar Convention</b>	The Convention's mission is "the conservation and wise use of all wetlands through local and national actions and international	<p>Under the "three pillars" of the Convention, the Contracting Parties commit to:</p> <ul style="list-style-type: none"> <li>Work towards the wise use of all their wetlands;</li> </ul>	Where new land use developments or activities occur as a result of this legislation,

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	<p>cooperation, as a contribution towards achieving sustainable development throughout the world”.</p>	<ul style="list-style-type: none"> <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>	<p>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><b>European 2020 Strategy for Growth</b></p>	<p>Europe 2020 sets out a vision of Europe’s social market economy for the 21st century and puts forward three mutually reinforcing priorities:</p> <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>	<p>In order to reach these priorities, the Commission proposes five quantitative targets to fulfil by 2020:</p> <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>	<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>
<b>National Level</b>			
<p><b>Ireland 2040 - Our Plan, the National Planning Framework, and the National Development Plan</b></p>	<p>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.</p> <p>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.</p>	<p>National Strategic Outcomes as follows:</p> <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>	<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><b>Planning, Land Use and Transport Outlook 2040</b></p>	<p>The PLUTO will take account of forecasted future economic and demographic scenarios, affordability considerations and relevant Government policies and will:</p> <ol style="list-style-type: none"> <li>1. Quantify in broad terms the appropriate scale of financial investment in land transport over the long term;</li> <li>2. Consider how fiscal, environmental and technological developments might impact on this investment; and,</li> <li>3. Identify strategic priorities for future investment to ensure land transport infrastructure provision facilitates the objectives of Project Ireland 2040.</li> </ol>	<p>The framework establishes high-level investment priorities to efficiently and effectively address key transport challenges identified by the background analysis and to ensure that transport investment is aligned with and supports Government’s overarching spatial and climate change objectives, as articulated in the National Planning Framework and Climate Action Plan.</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><b>Planning and Development Act 2000 (as amended)</b></p>	<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> </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</p>



SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		<ul style="list-style-type: none"> <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>	objectives of the regulatory framework for environmental protection and management.
<p><b>European Communities (Environmental Assessment of Certain Plans and Programmes Regulations 2004 (S.I. 435 of 2004), as amended by S.I. 200 of 2011</b></p>	<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.
<p><b>European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2011, as amended)</b></p>	<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.
<p><b>Waste Management Act 1996, as amended</b></p>	<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.
<p><b>European Communities Environmental Objectives (FPM) Regulations 2009 (S.I 296 of 2009)</b></p>	<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.
<p><b>European Communities Environmental Objectives (Groundwater) Regulations 2010 (S.I. 9 of 2010), as amended (S.I. No. 366 of 2016)</b></p>	<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</li> </ul>	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.	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

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	<p>Council on the protection of groundwater against pollution and deterioration.</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>	<p>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><b>European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2014 (S.I. No. 31 of 2014)</b></p>	<ul style="list-style-type: none"> <li>These Regulations, which give effect to Ireland’s 3<sup>rd</sup> Nitrates Action Programme, provide statutory support for good agricultural practice to protect waters against pollution from agricultural sources</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> <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>	<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><b>Climate Action and Low Carbon Development Act 2015, as amended</b></p>	<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>	<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><b>National Climate Action Plan 2023 and emerging Climate Action Plan 2024</b></p>	<p>The National Climate Action Plan 2023 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.</p> <p>The emerging Climate Action Plan 2024 is being subject to public consultation and builds upon the 2023 Plan by refining and updating the measures and actions required to deliver the carbon budgets and sectoral emissions ceilings.</p>	<p>The Plan lists the actions needed to deliver on Ireland’s climate targets and sets indicative ranges of emissions reductions for each sector of the economy. It will be updated periodically to ensure alignment with Ireland’s legally binding economy-wide carbon budgets and sectoral ceilings.</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><b>Emerging Tipperary County Council Climate Action Plan 2024</b></p>	<p>Under the National Climate Action Plan 2023, Tipperary County Council is required to prepare a locally specific climate action plan for its administrative area. Once adopted, this plan will be valid for five years, and is subject to update at least every five years. The emerging Tipperary County Council Climate Action Plan has been prepared and subject to public consultation. When adopted, it will contribute towards addressing the mitigation of greenhouse gas</p>	<p>The Tipperary County Council Climate Action Plan provides:</p> <ul style="list-style-type: none"> <li>An emphasis on a place-based approach to climate action, delivering a better understanding of greenhouse gas emissions and climate-related risks at a local level;</li> <li>Context-specific conditions and locally-tailored policy making;</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</p>

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	emissions, climate change adaptation, and strengthening the alignment between national climate policy and the delivery of local climate action.	<ul style="list-style-type: none"> <li>Evidence-based and integrated climate action through adaptation and mitigation measures, centred around an understanding of the role of the Council in climate action; and</li> <li>Strategic direction at local and community levels on the delivery of the national climate objective.</li> </ul>	align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
<b>The Sustainable Development Goals National Implementation Plan (2018 – 2020)</b>	<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 a 'SDG Matrix' which identifies the responsible Government Departments for each of the 169 targets. It also includes a 'SDG Policy Map' indicating the relevant national policies for each of the targets.</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.
<b>Infrastructure and Capital Investment Plan (2016-2021)</b>	<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.
<b>European Union (Birds and Natural Habitats) (Sea-Fisheries) Regulations 2013 (S.I. 290 of 2013)</b>	These regulations have been drafted to implement the responsibilities of the Minister for Agriculture Food and the Marine in relation to sea fisheries in Natura 2000 sites, in accordance with the Habitats and Birds Directives as transposed by the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2011).	<ul 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.
<b>Ireland's National Renewable Energy Action Plan 2010 (Irish Government submission to the European Commission)</b>	<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

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
<b>Strategy for Renewable Energy (2012-2020)</b>	<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>objectives of the regulatory framework for environmental protection and management.</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>
<b>National Climate Mitigation Plan 2017</b>	<ul style="list-style-type: none"> <li>The Plan represents an initial step to set Ireland on a pathway to achieve the deep decarbonisation required in Ireland by mid-century in line with the Government's policy objectives.</li> </ul>	<p>The National Mitigation Plan focuses on the following issues:</p> <ul style="list-style-type: none"> <li>Climate Action Policy Framework</li> <li>Decarbonising Electricity Generation</li> <li>Decarbonising the Built Environment</li> <li>Decarbonising Transport</li> <li>An Approach to Carbon Neutrality for Agriculture, Forest and Land Use Sectors</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>
<b>National Clean Air Strategy [in preparation]</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<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>
<b>EirGrid's Grid25 Strategy and associated Grid25 Implementation Programme 2017-2022</b>	<ul style="list-style-type: none"> <li>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></li> </ul>	<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>
<b>Strategy for the Future Development of National and Regional Greenways (2018)</b>	<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</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> </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</p>

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	<p>number of people using Greenways as a visitor experience and as a recreational amenity.</p>	<ul style="list-style-type: none"> <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> <li>Greenways that are developed with all relevant stakeholders in line with an agreed code of practice.</li> </ul>	<p>– 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><b>National Water Resources Plan [in preparation]</b></p>	<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> <li>The preparation of the NWRP has been divided into two phases, the combination of which will become the final NWRP. The NWRP Framework Plan (Phase 1) has now been adopted. Phase 2 of the NWRP (four Regional Water Resources Plans), currently in preparation, will address the needs across the 535 individual water supplies and identify the solutions to address these needs.</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>Assess the water resources available at a national level including lakes, rivers and 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><b>National Strategic Plan for Aquaculture Development (2014-2020)</b></p>	<p>Vision: <i>"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>	<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>	<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><b>Construction 2020, A Strategy for a Renewed Construction Sector</b></p>	<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>	<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><b>Sustainable Development: A Strategy for Ireland (1997)</b></p>	<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>	<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</p>

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
<b>National Landscape Strategy for Ireland 2015-2025 and National Landscape Character Assessment (pending preparation)</b>	<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>	<p>objectives of the regulatory framework for environmental protection and management.</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>
<b>National Hazardous Waste Management Plan 2021-2027</b>	<p>This Plan sets out the priorities to be pursued over the next six years and beyond to improve the management of hazardous waste, taking into account the progress made since the previous plan and the waste policy and legislative changes that have occurred since the previous plan was published. Section 26 of the Waste Management Act 1996 as amended, sets out the overarching objectives for the National Hazardous Waste Management Plan. In this context, the following objectives are included as priorities for the revised Plan period:</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>	<p>The revised Plan makes various recommendations under topics including the following:</p> <ul style="list-style-type: none"> <li>Prevention</li> <li>Collection</li> <li>Self-sufficiency</li> <li>Regulation</li> <li>Legacy issues</li> <li>North-south cooperation</li> <li>Guidance and awareness</li> <li>Implementation</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>
<b>Ministerial Guidelines such as Sustainable Rural Housing Guidelines and Flood Risk Management Guidelines</b>	<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>
<b>HSE Healthy Ireland Framework for Improved Health and Wellbeing 2013-2025</b>	<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</p>

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
<b>Our Sustainable Future: A framework for Sustainable Development for Ireland 2012</b>	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.	<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>objectives of the regulatory framework for environmental protection and management.</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>
<b>Smarter Travel – A Sustainable Transport Future – A New Transport Policy for Ireland 2009 – 2020 (2009)</b>	<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>
<b>Investing in our Future: A Strategic Framework for Investment in Land Transport (SFILT) – Department of Transport, Tourism and Sport</b>	<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>
<b>Delivering a Sustainable Energy Future for Ireland – The Energy Policy Framework 2007 – 2020 (2007)</b>	<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>
<b>National Adaptation Framework (NAF) 2018 and 2024 and associated regional, local and sectoral adaptation plans</b>	<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> </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</p>

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		<ul style="list-style-type: none"> <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>	<p>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><b>National Renewable Energy Action Plan (2010)</b></p>	<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>	<p>Including Ireland’s 16% target of gross final consumption to come from renewables by 2020.</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><b>National Energy Efficiency Action Plan for Ireland (2009 – 2020)</b></p>	<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>	<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><b>Wildlife Act of 1976</b> <b>Wildlife (Amendment) Act, 2000</b></p>	<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>	<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><b>Actions for Biodiversity (2017-2021) Ireland’s National Biodiversity Plan</b></p>	<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>	<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>



SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
<b>National Broadband Plan (2012)</b>	<ul style="list-style-type: none"> <li>Sets out the strategy to deliver high speed broadband throughout Ireland.</li> </ul>	<p>The Plan sets out:</p> <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.
<p><b>European Communities (Water Policy) Regulations of 2003 (SI 722 of 2003)</b></p> <p><b>European Communities (Water Policy) Regulations of 2003 (SI 350 of 2014)</b></p> <p><b>European Communities Environmental Objectives (Surface waters) Regulations of 2009 (SI 272 of 2009)</b></p>	<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> <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>Implements River basin districts and characterisation of RBDs and River Basin Management Plans.</li> <li>Requires the public to be informed and consulted on the Plan and for progress reports to be published on RBDs.</li> <li>Implements a Register of protected areas, Classification systems and Monitoring programmes for water bodies.</li> <li>Allows the competent authority to recover the cost of damage/destruction of status of water body.</li> <li>Outlines environmental objectives and programme of measures and environmental quality standards for priority substances.</li> <li>Outlines criteria for assessment of groundwater.</li> <li>Outlines environmental objectives to be achieved for surface water bodies.</li> <li>Outlines surface water quality standards.</li> <li>Establishes threshold values for the classification and protection of surface waters against pollution and deterioration in quality.</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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.
<b>European Communities Environmental Objectives (Groundwater) Regulations of 2010 (SI 9 of 2010)</b>	<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>	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.
<b>Water Pollution Acts 1977 to 1990</b>	<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>	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><b>Water Services Act 2007</b></p> <p><b>Water Services (Amendment) Act 2012</b></p> <p><b>Water Services Act (No. 2) 2013</b></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> </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> </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

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <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>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><b>Irish Water's Water Services Strategic Plan 2015 and associated Proposed Capital Investment Plan (2014-2016)</b></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><b>Raised Bog SAC Management Plan and Review of Raised Bog Natural Heritage Areas</b></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><b>Agri-Food Strategy 2030</b></p>	<p>This 10-year Strategy sets out four high-level "Missions" to be achieved in order to develop such a system in Ireland:</p> <ol style="list-style-type: none"> <li>1. A Climate Smart, Environmentally Sustainable Agri-Food Sector</li> <li>2. Viable and Resilient Primary Producers with Enhanced Wellbeing</li> <li>3. Food that is Safe, Nutritious and Appealing, Trusted and Valued at Home and Abroad</li> <li>4. An Innovative, Competitive and Resilient Sector, driven by Technology and Talent</li> </ol>	<p>Each of the Missions has a set of Goals which are underpinned by a series of Actions.</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><b>Agri-vision 2015 Action Plan</b></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>

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
<p><b>Rural Environmental Protection Scheme (REPS)</b></p> <p><b>Agri-Environmental Options Scheme (AEOS)</b></p> <p><b>Green, Low-Carbon, Agri-environment Scheme (GLAS)</b></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><b>National Rural Development Programme</b></p>	<ul style="list-style-type: none"> <li>• 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</li> </ul>	<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><b>National Forestry Programme (2014-2020)</b></p>	<p>Represents Ireland’s proposals for 100% State aid funding for a new Forestry Programme for the period 2014 – 2020.</p>	<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><b>River Basin Management Plan for Ireland 2022-2027 3rd Cycle</b></p>	<p>This River Basin Management Plan sets out the measures that are necessary to protect and restore water quality in Ireland. The overall aim of the plan is to ensure that our natural waters are sustainably managed and that freshwater resources are protected so as to maintain and improve Ireland’s water environment.</p>	<p>The River Basin Management Plan sets out the measures necessary to protect and improve the quality of Ireland’s waters. These plans are prepared in 6-year cycles, during which a programme of measures must be implemented so as to achieve water quality objectives. Good water quality contributes to protecting human health by improving the quality of drinking water sources and bathing waters.</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><b>National Peatlands Strategy (2015-2025)</b></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:</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</p>

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
<b>Flood Risk Management Plans arising from National Catchment Flood Risk Assessment and Management Programme</b>	<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>	<ul style="list-style-type: none"> <li>To inform the provision of appropriate incentives, financial supports and disincentives where required.</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>objectives of the regulatory framework for environmental protection and management.</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>
<b>Draft National Bioenergy Plan 2014 - 2020</b>	<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>
<b>Draft Renewable Electricity Policy and Development Framework (DCCAE) 2016</b>	<p>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.</p>	<p>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.</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>
<b>National Alternative Fuels Infrastructure for the Transport Sector (DTTAS) 2017- 2030</b>	<p>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.</p>	<p>Targets for alternative fuel infrastructure include the following:</p> <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>	<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>
<b>Food Wise 2025 (DAFM)</b>	<p>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.</p>	<p>Food Wise 2025 identifies ambitious and challenging growth projections for the industry over the next ten years including:</p> <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>	<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</p>

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
<b>National Cycle Network Scoping Study 2010</b>	<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>	<p>– 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>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>
<b>National Policy Framework for Alternative Fuels Infrastructure for Transport in Ireland 2017 to 2030</b>	<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>	<p>This policy set out to achieve five key goals in transport:</p> <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>	<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>
<b>Tourism Action Plan 2019-2021</b>	<p>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.</p>	<p>The Plan contains 27 actions focusing on the following areas:</p> <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>	<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>
<b>Tourism Policy Statement: People, Place and Policy – Growing Tourism to 2025</b>	<p>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.</p>	<p>The Tourism Policy Statement sets three headline targets to be achieved by 2025:</p> <ul style="list-style-type: none"> <li>• Overseas tourism revenue of €5 billion per year 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>	<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>

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
<b>Draft Renewable Electricity Policy and Development Framework (DCCAE)</b>	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.
<b>National Alternative Fuels Infrastructure for the Transport Sector (DTTAS) 2017- 2030</b>	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.
<b>All Ireland Pollinator Plan 2021-2025</b>	The All-Ireland Pollinator Plan is an island-wide attempt to reverse declines in pollinating insects 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>	This voluntary Plan identified 81 actions, shared out between over 100 governmental and non-governmental organisations. A large focus of the Plan is to identify actions to improve the quality and amount of flower-rich habitat. Actions range from creating pollinator highways along our transport routes, to supporting pollinators on farmland, in gardens, businesses, and on public land.	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.
<b>Regional/ County/Local Level</b>			
<b>Southern Regional Economic and Spatial Strategy 2019-2031</b>	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 11 constituent local authorities: Carlow County Council; Tipperary County Council; Waterford City & County Council; Wexford County Council; Kilkenny County Council; Cork City Council; Cork County Council; Kerry County Council; Clare County Council; and Limerick City and 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.
<b>Integrated Implementation Plan 2019-2024</b>	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	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> </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

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	activities related to small public service vehicles are dealt with on a national basis.	<ul style="list-style-type: none"> <li>Integration Measures and Sustainable Transport Investment;</li> <li>Integrated Service Plan; and</li> <li>Integration and Accessibility.</li> </ul>	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.
<b>NPWS Conservation Plans and/or Conservation Objectives for SACs and SPAs</b>	Management planning for nature conservation sites has a number of aims. These include: <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>Conservation objectives for SACs and SPAs (i.e. sites within the Natura 2000 network) have to be set for the habitats and species for which the sites are selected.</li> <li>These objectives are used when carrying out appropriate assessments for plans and projects that might impact on these sites.</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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.
<b>Groundwater Protection Schemes</b>	A Groundwater Protection Scheme provides guidelines for the planning and licensing authorities in carrying out their functions, and a framework to assist in decision-making on the location, nature and control of developments and activities in order to protect groundwater.	A Groundwater Protection Scheme aims to maintain the quantity and quality of groundwater, and in some cases improve it, by applying a risk assessment-based approach to groundwater protection and sustainable development.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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.
<b>Local Economic and Community Plans (LECPs), including the Tipperary LECP 2024</b>	The overarching vision for each LECP is: “to promote the well-being and quality of life of citizens and communities	The purpose of the LECP, as provided for in the Local Government Reform Act 2014, is to set out, for a six-year period, the objectives and actions needed to promote and support the economic development and the local and community development of the relevant local authority area, both by itself directly and in partnership with other economic and community development stakeholders.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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.
<b>Tipperary County Development Plan 2022-2028 and other Land Use Plans in force within Tipperary and in other adjoining planning authorities. This includes Development Plans, Local Area Plans and Planning Schemes</b>	<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 Regional Economic and Spatial Strategies.</li> <li>Set out the policies and proposals to guide development in the specific Local Authority 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.
<b>Limerick Metropolitan Spatial Plan (MASP)</b>	Strengthen the role of the Limerick-Shannon Metropolitan Area as an international location of scale, a complement to Dublin and a	<ul style="list-style-type: none"> <li>Support the regeneration and continued investment into Limerick City through initiatives such as Limerick 2030 and Limerick Regeneration and</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	primary driver of economic and population growth in the Southern Region.	to further enhance Limerick City as a primary economic driver for the Southern Region.	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.
<b>Tipperary County Biodiversity Action Plan 2021-2025</b>	Aims to protect, conserve, enhance and restore heritage, biodiversity and ecosystem services across all spectrums.	Plan's objectives include: <ul style="list-style-type: none"> <li>• gathering information on the biodiversity resource</li> <li>• managing the resource</li> <li>• education and awareness</li> <li>• cooperation to achieve objectives</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.
<b>County Tipperary Character Assessment and Landscape Character Assessments in adjoining local authorities</b>	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.
<b>Strategic Tourism Marketing, Experience and Destination Development Plan 2016-2021 and 'Tipperary Transforming – Tourism Product Development Plan 2020 – 2030'</b>	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.	In meeting that objective the Plan's aims are: <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.
<b>Tipperary Heritage Plan 2017-2021</b>	The Plan's overarching aim is 'Contributing towards quality of life'.	The Plan details a number of actions and initiatives aimed at ensuring that heritage continues to make a significant contribution to quality of life and remains an important part of the social and cultural infrastructure of the County.	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.



SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
<b>Tipperary County Council's Noise Action Plan 2019-2023</b>	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 approach to meeting the requirements of the Directive in Ireland.	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.
<b>Tipperary County Council's Climate Adaption Strategy 2019-2024</b>	Respond to the impact that climate change is having, and will continue to have. Attempt to climate change adaptation and mitigation.	The Tipperary County Council Climate Change Action Plan 2019- 2024 features a range of actions across sectors including: Energy and Buildings; Flood Relief and Resilience; Transport; Resource Management; Coastal Protection and nature-based solutions; and Communities.	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.
<b>Tipperary County Council Renewable Energy Strategy</b>	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.
<b>'The Connecting Ireland Rural Mobility Plan' by the National Transport Authority</b>	The plan aims to improve mobility in rural areas, and it will do this by providing better connections between villages and towns by linking these areas with an enhanced regional network connecting cities and regional centres nationwide.	These principles include: <ul style="list-style-type: none"> <li>• Increasing frequency on existing routes to attract more passengers;</li> <li>• Design useful and integrated timetables;</li> <li>• Schedule services to arrive at a centre before 09:00, particularly for work and education trips;</li> <li>• Allow for trips in the middle of the day for those shopping, attending health appointments, or visiting friends and family;</li> <li>• Schedule a return home at around 17:30 and potentially provide later services for socialising and evening retail where there is demand;</li> <li>• Provide services seven days a week;</li> <li>• Provide local routes that connect smaller settlements with the regional public transport network with integrated timetables that allow more interchange opportunities; and</li> <li>• Serve key locations within towns, e.g. hospitals, train stations, educational institutes, 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.
<b>Southern Regional Waste Management Plan 2015-2021</b>	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

SEA Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
			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.
<b>Fáilte Ireland Tourism plans, strategies, including those relating to 'Ireland's Ancient East', 'Lough Derg Visitor Experience Programme 2020-2024' 'Ireland's Hidden Heartlands' and 'Wild Atlantic Way' Brands, Regional Tourism Development Strategies and Destination Experience Development Plans</b>	Fáilte Ireland's work includes preparing various plans and strategies for Ireland's Hidden Heartlands, the Wild Atlantic Way, Ireland's Ancient East 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.
<b>Various existing, planned and emerging projects provided for by the above plans and programmes</b>	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.

# SEA ENVIRONMENTAL REPORT

## APPENDIX II – NON-TECHNICAL SUMMARY

---

FOR THE

### NENAGH AND ENVIRONS LOCAL AREA PLAN 2024-2030

**for: Tipperary County Council**

Civic Offices  
Nenagh  
County Tipperary



Comhairle Contae Thiobraid Árann  
Tipperary County Council

**by: CAAS Ltd.**

1<sup>st</sup> Floor  
24-26 Ormond Quay Upper  
Dublin 7



**MARCH 2024**

## Table of Contents

<b>Section 1</b>	<b>Introduction and Terms of Reference</b> .....	<b>1</b>
<b>Section 2</b>	<b>The Plan</b> .....	<b>3</b>
2.1	Introduction .....	3
2.2	Summary of the Plan.....	3
2.3	Strategic work undertaken by the Council to ensure contribution towards environmental protection and sustainable development .....	4
2.4	Relationship with other relevant Plans and Programmes .....	4
<b>Section 3</b>	<b>The Environmental Baseline</b> .....	<b>5</b>
3.1	Introduction .....	5
3.2	Likely Evolution of the Environment in the Absence of the Plan.....	5
3.3	Biodiversity and Flora and Fauna .....	5
3.4	Population and Human Health .....	6
3.5	Soil .....	7
3.6	Water .....	9
3.7	Air and Climatic Factors.....	11
3.8	Material Assets .....	12
3.9	Cultural Heritage.....	13
3.10	Landscape.....	14
3.11	Strategic Environmental Objectives .....	14
<b>Section 4</b>	<b>Alternatives</b> .....	<b>16</b>
4.1	Introduction .....	16
4.2	Limitations in Available Alternatives.....	16
4.3	Type 1 Alternatives: Town Centre First Approach .....	16
4.4	Type 2 Alternatives: Infrastructure and Environmental Approach.....	17
4.5	Type 3 Alternatives: Area Based Transport Assessment Alternatives.....	18
4.6	Type 4 Alternatives: Transport Infrastructure Alternatives .....	19
4.7	Selected Alternatives.....	19
<b>Section 5</b>	<b>Summary of Effects arising from Plan</b> .....	<b>20</b>
<b>Section 6</b>	<b>Mitigation and Monitoring Measures</b> .....	<b>24</b>
6.1	Mitigation .....	24
6.2	Monitoring.....	24

# Section 1 Introduction and Terms of Reference

This is the Non-Technical Summary of the Environmental Report for the Nenagh and Environs Local Area Plan 2024-2030 (hereafter referred to as 'the 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

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

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

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.

The Plan directs incompatible development away from the most sensitive areas of Nenagh. Development of generally more robust, well-serviced and well-connected areas will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation.

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

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

## 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.

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

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

## Section 2 The Plan

### 2.1 Introduction

Tipperary County Council has adopted a Local Area Plan (LAP) for Nenagh under the Planning and Development Act 2000 (as amended). The Plan sets out an overall strategy for the proper planning and sustainable development over the years 2024-2030.

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

The LAP should be read in conjunction with the Tipperary County Development Plan 2022-2028, which sets out the overarching development strategy for the administrative area of Tipperary County Council. Where conflicting policies and objectives arise between the LAP and the County Development Plan the County Development Plan shall take precedence.

### 2.2 Summary of the Plan

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

The function of the Plan is to act as a framework for sustainable investment, to enable employment and homes, to protect the environment and heritage and to help deliver a good quality of life for everyone.

The LAP is comprised of the following documents:

- A Written Statement with specific policies and objectives laid out across ten sections
- Maps including land-use zoning with flood risk areas, and built and natural heritage
- Appendices as follows:
  1. Serviced Land Assessment
  2. Local Transport Plan
  3. Regeneration Sites
  4. Strategic Environmental Assessment Environmental Report and Non-Technical Summary
  5. Appropriate Assessment Natura Impact Report
  6. Strategic Flood Risk Assessment

The LAP is focused on a renewed and targeted approach to compact growth and regeneration, building on the extensive range of 'town-centre' focused projects already initiated in Nenagh. The town centre will form the heart and focal point of Nenagh, with clear consideration of climate change mitigation and adaptation measures and modal shift change in terms of how we get around. At the centre of this LAP is consideration of quality of life for the community in the form of housing, jobs, education and amenities.

Part of the Plan's Vision and Planning and Development Strategy is that: "In 2030, Nenagh will be a vibrant, sustainable and age-friendly community. The community will benefit from a high quality of life, quality housing choices, improved access to employment options and an improved range of services in the town. The town will benefit from significant investment and regeneration in the central areas of the town, enhanced social, cultural and tourism activities in the town, an increasing town centre residential population, and thriving and vibrant local businesses and services."

The Plan's overarching Planning and Development Policies are as follow:

- Policy 2.1 Require the retrofitting of existing structures on brownfield sites, unless it is demonstrated that retrofitting is unfeasible, or redevelopment of the site would provide positive carbon impact through the re-design, construction and use stages of a new building, compared with retrofitting.

- Policy 2.2 Support new development that will enable sustainable housing growth, employment, community development and prosperity for Nenagh as a Key Town in line with the Strategic Objectives of the TCDP.
- Policy 2.3 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 Tipperary County Council Climate Action Plan 2024-2029 (and any review thereof).
- Policy 2.4 Support compact residential growth in Nenagh through the sustainable intensification and consolidation of the town centre and established residential areas to meet identified housing targets and requirements in line with the Sustainable Residential Development and Compact Settlements Guidelines for Planning Authorities (DHLGH, 2024) and any review thereof.
- Policy 2.5 Facilitate development of existing but non-conforming and long-established uses, to support their continued operation and expansion, provided such does not result in loss of amenity to adjoining properties, adverse impact on the environment, visual detriment to the character of the area or creation of a traffic hazard.

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

In advance of the placing of the Draft Plan on public display, Tipperary County Council undertook various works in order to inform the preparation of the Plan. This included a detailed population analysis and preparation of a Local Transport Plan and Serviced Land Assessment, which have informed and are appended to the Plan.

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

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

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

Many of the major issues affecting Nenagh's development are contingent on national policy and government funding. The Plan sits within a hierarchy of statutory documents setting out public policy for, among other things, land use planning, infrastructure, sustainable development, tourism, environmental protection and environmental management. The Plan must comply with relevant higher-level strategic actions and may, in turn, guide lower-level strategic actions. These documents include plans and programmes such as those referred to throughout this summary. These documents have been subject to their own environmental assessment processes, as relevant.

The National Planning Framework (NPF) sets out Ireland's planning policy direction up to 2040. The NPF is to be implemented through Regional Spatial and Economic Strategies (RSESs) and lower tier Development Plans and Local Area Plans. The RSES for the Southern Region sets out objectives for land use planning, infrastructure, sustainable development, environmental protection and environmental management that have been subject to environmental assessment and must be implemented through the Tipperary County Development Plan 2022-2028, which sets out the overarching development strategy for the administrative area of Tipperary County Council, and the Local Area Plan.

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



## Section 3 The Environmental Baseline

### 3.1 Introduction

The summary of the environmental baseline of the Plan area 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 Plan and in order to determine appropriate monitoring measures.

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

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

As a result, there would be both:

- A decreased likelihood in the extent, magnitude and frequency of the positive environmental effects identified by this assessment occurring; and
- An increased likelihood in the extent, magnitude and frequency of the adverse environmental effects identified by this assessment occurring.

### 3.3 Biodiversity and Flora and Fauna

Key ecological sensitivities within and surrounding the Plan area include:

- **Aquatic and riverine ecology associated with the area's streams and rivers, their tributaries and riparian buffer zones**, including the **Nenagh River** (flowing east of the Plan area) and the **Ollatrim River** (joining the Nenagh River east of Nenagh town), their tributaries and riparian buffer zones;
- **Locally important habitats within the Plan area**, including various woodlands, trees, parks, gardens, hedgerows, old buildings/stone walls, railway lines, pollinator sites and lands used for agriculture within and surrounding the Plan area, providing habitats for flora and fauna and facilitating linkages and corridors to the surrounding countryside for the wildlife; and
- **Designated sites within 15 km of the Plan area**, including the Lough Ourna proposed Natural Heritage Area, located c. 5 km to the north of the Plan area, and the Lough Derg Special Protection Area and proposed Natural Heritage Area, located c. 6 km to the west of the Plan area.

There are no Special Areas of Conservation<sup>1</sup> (SACs) or Special Protection Areas<sup>2</sup> (SPAs) designated within the Plan area; however, there are a total of ten European sites (seven SACs and three SPAs) within 15 km of the Plan boundary (as listed below and shown on Figure 3.1):

- Lough Derg (Shannon) SPA (Site Code: 004058)<sup>3</sup>;
- Slievefelim to Silvermines Mountains SPA (Site Code 004165)<sup>4</sup>;
- Silvermine Mountains SAC (Site Code: 000939)<sup>5</sup>;
- Silvermines Mountains West SAC (Site Code: 002258)<sup>6</sup>;
- Bolingbrook Hill SAC (Site Code: 002124)<sup>7</sup>;

<sup>1</sup> SACs have been selected for protection under the European Council Directive on the conservation of natural habitats and of wild fauna and flora (92/43/EEC) due to their conservation value for habitats and species of importance in the European Union. The Habitats Directive seeks to establish Natura 2000, a network of protected areas throughout the EU. It is the responsibility of each member state to designate SACs to protect habitats and species, which, together with the SPAs designated under the 1979 Birds Directive, form Natura 2000. The European Communities (Birds and Natural Habitats) Regulations 2011 consolidate the European Communities (Natural Habitats) Regulations 1997 to 2005 and the European Communities (Birds and Natural Habitats) (Control of Recreational Activities) Regulations 2010. The Regulations have been prepared to address several judgments of the Court of Justice of the European Union (CJEU) against Ireland, notably cases C-418/04 and C-183/05, in respect of failure to transpose elements of the Birds Directive and the Habitats Directive into Irish law.

<sup>2</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.

<sup>3</sup> Sensitive features comprise: wetland and waterbirds; tufted duck; goldeneye; common tern; and cormorant.

<sup>4</sup> Sensitive features comprise: hen harrier.

<sup>5</sup> Sensitive features comprise: Northern Atlantic wet heaths with *Erica tetralix*.

<sup>6</sup> Sensitive features comprise: European dry heaths; calaminarian grasslands of the *Violetalia calaminariae*; and Northern Atlantic wet heaths with *Erica tetralix*.

- Lough Derg, North-East Shore SAC (Site Code: 002241)<sup>8</sup>;
- Lower River Shannon SAC (Site Code: 002165)<sup>9</sup>;
- Keeper Hill SAC (Site Code: 001197)<sup>10</sup>;
- Slieve Aughty Mountains SPA (Site Code: 004168)<sup>11</sup>; and
- Scohaboy (Sopwell) Bog SAC (Site Code: 002206)<sup>12</sup>.

There is one hydrologically connected European site within the wider region beyond 15 km buffer zone (i.e. downstream of the Plan boundary)<sup>13</sup>, the River Shannon and River Fergus Estuaries SPA (Site Code: 004077).<sup>14</sup>

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. They are composed of linear features, such as tree lines, hedgerows and rivers/streams, which provide corridors or stepping stones for wildlife species moving within their normal range. They are important for the migration, dispersal and genetic exchange of species of flora and fauna particularly for mammals, especially for bats and small birds and facilitate linkages both between and within designated ecological sites, the non-designated surrounding countryside and urban areas.

### Existing Problems

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

- Agriculture;
- Forestry;
- 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, no pressures and pressures from outside the Member State.

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

## 3.4 Population and Human Health

Census 2016 has recorded a population of 8,968 persons within the Plan area<sup>15</sup>. The Core Strategy in the Tipperary County Development Plan 2022-2028 provides for a population increase of 1,793 persons for Nenagh over the Plan period.

<sup>7</sup> Sensitive features comprise: European dry heaths; species-rich Nardus grasslands, on siliceous substrates in mountain areas - and submountain areas in Continental Europe; and Northern Atlantic wet heaths with *Erica tetralix*.

<sup>8</sup> Sensitive features comprise: limestone pavements; alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior*; *Juniperus communis* formations on heaths or calcareous grasslands; *Taxus baccata* woods of the British Isles; Alkaline fens; and calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae*.

<sup>9</sup> Sensitive features comprise: otter; freshwater pearl mussel; large shallow inlets and bays; Mediterranean salt meadows; bottlenose dolphin; brook lamprey; coastal lagoons; Atlantic salt meadows; water courses of plain to montane levels with the *Ranunculon fluitantis* and *Callitricho-Batrachion* vegetation; *Salicornia* and other annuals colonising mud and sand; perennial vegetation of stony banks; estuaries; river lamprey; mudflats and sandflats not covered by seawater at low tide; sandbanks which are slightly covered by sea water all the time; Atlantic salmon; vegetated sea cliffs of the Atlantic and Baltic coasts; *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils; sea lamprey; alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior*, and reefs.

<sup>10</sup> Sensitive features comprise: blanket bogs; and Northern Atlantic wet heaths with *Erica tetralix*.

<sup>11</sup> Sensitive features comprise: merlin; and hen harrier.

<sup>12</sup> Sensitive features comprise: degraded raised bogs still capable of natural regeneration.

<sup>13</sup> There are also three additional European sites with groundwater sensitive Qualifying Interests and within the same groundwater bodies as the Plan area, but beyond 15 km buffer zone, namely: Kilcarren-Firville Bog SAC (Site Code: 000647); River Shannon Callows SAC (Site Code: 000216); and Arragh More (Derrybreen) Bog (Site Code: 002207). For more detail refer to AA NIR report.

<sup>14</sup> Sensitive features comprise: golden plover; greenshank; grey plover; ringed plover; scaup; shelduck; shoveler; teal; wetland and waterbirds; whooper swan; wigeon; knot; lapwing; light-bellied brent goose; pintail; redshank; bar-tailed godwit; black-headed gull; black-tailed godwit; cormorant; curlew; and dunlin.

Census 2022 identified that the Built-up Area (BUA(w)) of Nenagh had population of 9,895. Though a direct comparison with the settlement area in Census 2016 and the BUA area in Census 2022 cannot be drawn, the geographical areas of the Electoral Districts (EDs) of the town, Nenagh West Urban West and Nenagh East Urban have not changed in the inter-census period. The combined population of these EDs has increased from 8,656 in 2016 to 9,507 in 2022, a 9.8% increase in population. This increase in population exceeds both the state (8.1%) and county (5.2%) over the same period. Population growth in the town is driven by an increase in the density of the urban population, increasing from 1,018 persons per square km in 2016 to 1,118 in 2022, a 9.8% increase in density.<sup>16</sup>

Nenagh is identified as a “Key Town” in the Tipperary County Development Plan 2022-2028, a strategically located urban centre with accessibility and significant influence in sub-regional context, delivering social and transport infrastructure, employment and economic prosperity.<sup>17</sup>

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

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

### Existing Problems

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

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

## 3.5 Soil

The built-up areas within and surrounding Nenagh are mainly made up of urban soils. Urban soils are soils, which have been disturbed, transported or manipulated by human activity in the urban environment and are often overlain by a non-agricultural, man-made surface layer that has been produced by mixing, filling or by contamination of land surfaces in urban and suburban areas.

There are no designated County Geological Sites occurring within the Plan area. The closest sites are Ardcroney Esker CGS (Site Code: TY002), located c. 3 km to the north-east of the Plan area and Carrigatogher M7 Road Cut CGS (Site Code: TY019), located c. 5 km to the south-west of the Plan area.

The GSI have identified<sup>18</sup> the Plan area as having mainly low levels of landslide susceptibility.

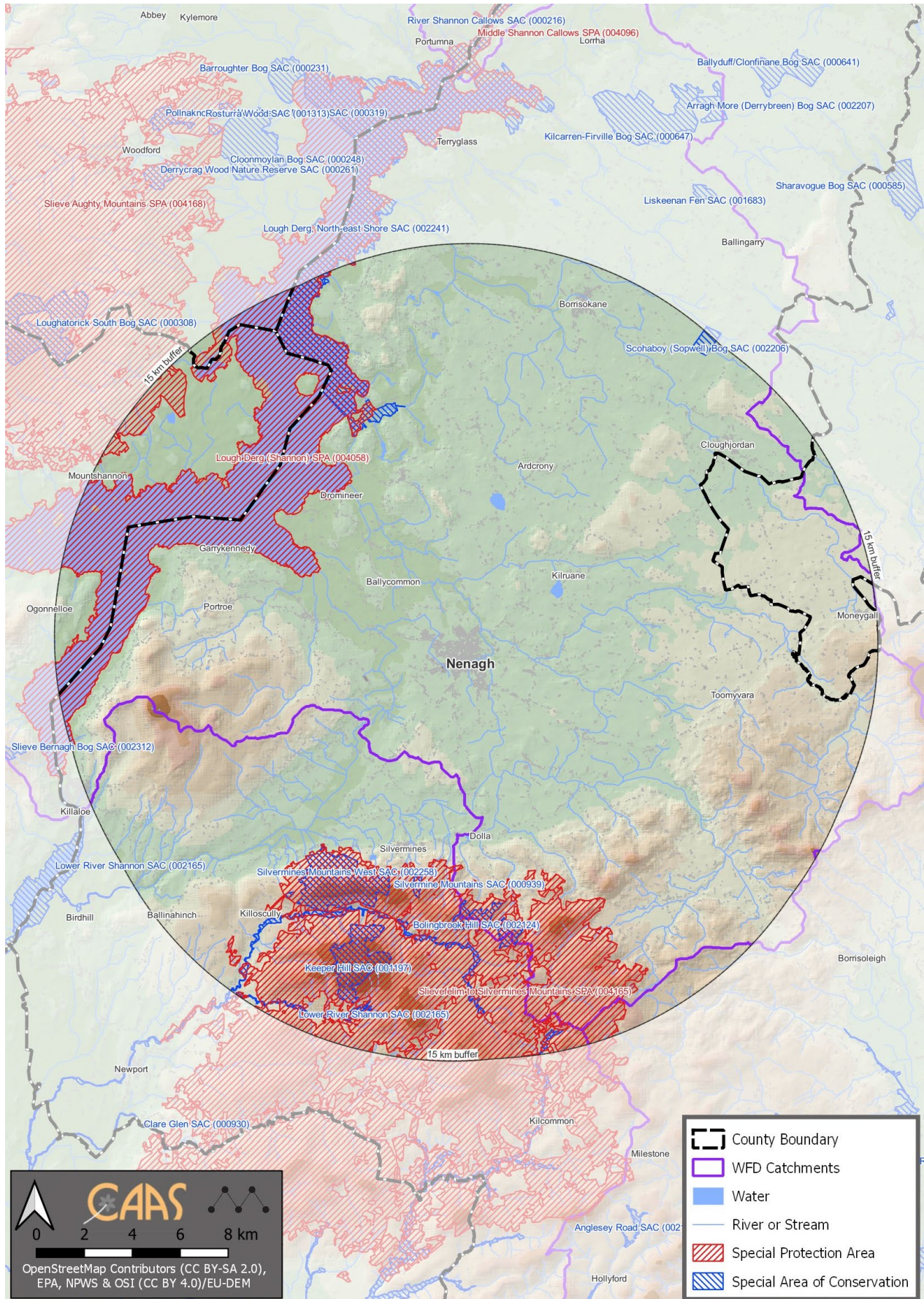
In the absence of mitigation, contaminated materials have the potential to adversely impact upon human health, water quality and habitats and species. As is the case with other urban and semi-urban areas across the country, there is potential for contamination at sites within the Plan area, especially where land uses occurred in the past, in the absence of environmental protection legislation.

<sup>15</sup> Tipperary County Development Plan 2022-2028.

<sup>16</sup> Nenagh Local Area Plan 2024-2030

<sup>17</sup> Tipperary County Development Plan 2022-2028

<sup>18</sup> <https://www.gsi.ie/en-ie/programmes-and-projects/geohazards/projects/Pages/Landslide-Susceptibility-Mapping.aspx>



**Figure 3.1 European Sites within and within 15 km buffer of the Plan area**

## 3.6 Water

### Surface and Ground Water Status

Surface water at and around Nenagh is channelled by several rivers and streams, forming part of the Lower Shannon River Catchment. The confluence of the Ollatrim and Nenagh rivers is located within the Plan boundary to the east of the Millers Brook estate. Smaller partly-culverted watercourses run through the town centre, into the Nenagh River and beyond into the Shannon water system at Dromineer. A number of other watercourses to the west of the Plan boundary drain into the Shannon at Youghallarra.

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*.

The current WFD (2016-2021) status<sup>19</sup> of various sections of the River Ollatrim, River Nenagh and Ardregane Stream draining the Plan area is *moderate* (identified by the EPA as: 'Ollatrim\_050'; 'Nenagh\_050'; 'Nenagh\_060'; 'Nenagh\_070'; and 'Ardregane Stream\_020') and sections of the Ardregane Stream and Gortadalaun Stream (identified by the EPA as: 'Ardregane Stream\_010' and 'Gortadalaun Stream\_10') is *poor*. Figure 3.2 illustrates the WFD surface water status within and surrounding the Plan area.

The WFD status (2016-2021) of all groundwater underlying the Plan area is currently identified as being of *good status*, meeting the objectives of the Water Framework Directive.

Surface and groundwater bodies will need to ensure no deterioration in order to comply with the objectives of the WFD. Various water bodies will need improvement to meet these objectives. The Plan includes provisions that will contribute towards maintenance and improvement in the status of waters.

### Aquifer Vulnerability and Productivity

Aquifer vulnerability refers to the ease with which pollutants of various kinds can enter into groundwater. The aquifers underlying the Plan area are as a mix of vulnerabilities:

- *High vulnerability* within central parts of the Plan area;
- *Extreme vulnerability and Extreme (Rock at or near surface or karst) vulnerability*, in parts of the west and south-east of the Plan area; and
- *Moderate vulnerability*, in parts of the south-east and north-east of the Plan area.

### Flooding

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

Flood risk management and drainage provisions are already in force through the Tipperary County Development Plan 2022-2028 and related provisions have been integrated into the Plan. In addition, land use zoning within the Plan area has been informed by the SFRA process and associated delineation of flood risk zones.

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

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

<sup>19</sup> As per EPA's WFD Status 2016-2021 classification (<https://gis.epa.ie/EPAMaps/>).



**Figure 3.2 Surface Water Status (2016-2021)**

### 3.7 Air and Climatic Factors

Climate mitigation describes the action to reduce the likelihood of climate change occurring or reduce the impact if it does occur. This can include reducing the causes of climate change (e.g. emissions of greenhouse gases) as well as reducing future risks associated with climate change. 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 Climate Action Plan 2023 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 set out in the Climate Act 2021. The Plan lists the actions needed to deliver on climate targets and sets indicative ranges of emissions reductions for each sector of the economy. It will be updated periodically, to ensure alignment with legally binding economy-wide carbon budgets and sectoral ceilings.

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, several Government Departments will be required to prepare sectoral adaptation plans in relation to a priority area that they are responsible for. The statutory Climate Change Adaptation Plan for the Transport Sector was prepared under the Climate Action and Low Carbon Development Act (2015) and the National Adaptation Framework (2018) and published by the Department of Transport in 2019. The Plan sets out the national strategy to reduce Ireland's vulnerability to the negative effects of climate change and to avail of any positive impacts, with an objective to help develop resilience within the sector in order to safeguard transport infrastructure from future climate impacts.

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

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

Under the National Climate Action Plan 2023, Tipperary County Council is required to prepare a locally specific climate action plan for its administrative area. Once adopted, this plan will be valid for five years, and is subject to update at least every five years. The Tipperary County Council Climate Action Plan will be developed over the coming year and will contribute towards addressing the mitigation of greenhouse gas emissions, climate change adaptation, and strengthening the alignment between national climate policy and the delivery of local climate action. The Tipperary County Council Climate Action Plan must cover the following areas:

- An emphasis on a place-based approach to climate action, delivering a better understanding of greenhouse gas emissions and climate-related risks at a local level;
- Context-specific conditions and locally-tailored policy making;
- Evidence-based and integrated climate action through adaptation and mitigation measures, centred around an understanding of the role of the Council in climate action; and
- Strategic direction at local and community levels on the delivery of the national climate objective.

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.

### 3.8 Material Assets

Other material assets, in addition to those referred to below, covered by the SEA include archaeological and architectural heritage (see Section 3.9) natural resources of economic value, such as water and air (see Sections 3.6 and 3.7).

#### Public Assets and Infrastructure

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

#### Waste Water

The Wastewater Treatment Plant (WWTP) serving Nenagh is currently not listed as a priority area (such areas are those where improvements are required to resolve urgent environmental issues).<sup>20</sup>

The Plan area is served by the Nenagh WWTP (Registration No. D0027-01), which has a design capacity of 12,000 Population Equivalent (PE).

The Nenagh WWTP is currently fully compliant with the Emission Limit Values (ELVs) set in the Wastewater Discharge Licence in the most recent available Annual Environmental Report 2022 (published in April 2023).<sup>21</sup>

A planned upgrade of the Nenagh Wastewater Treatment Plant Nenagh is currently underway by Uisce Éireann to increase the capacity of the plant. An application for planning permission for the upgrade works is due to be submitted in the first half of 2024. Project delivery timeframes for the project will be available when the investment planning process, which is currently underway for the next Capital Investment Plan (2025-2029), has concluded. Project timelines are subject to planning approvals and statutory consents being obtained. The upgraded plant will have sufficient capacity to cater for the projected growth to 2030 and beyond. In the interim, while the planned upgrade project is progressing, the existing WWTP has available capacity for 927 population equivalent<sup>22</sup>. Developers will be expected to engage with Uisce Éireann in developing proposals and the provision of a Connection Agreement with Uisce Éireann shall be a condition to the grant of planning permission for new developments prior to commencement of development. Ongoing improvement works are required in the town to ensure adequate separation of foul and surface water, and to service of lands identified for development over the lifetime of the Plan. Local network upgrades may be required some areas to provide capacity to individual sites.<sup>23</sup>

As per Section 8 of the Plan, 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.

#### Water Supply

Nenagh is located within the Nenagh (WRZ)<sup>24</sup> and currently served by the Nenagh Regional Public Water Supply (PWS). This PWS serves a population of 14,483 and produces 6,488 m<sup>3</sup>/day. Raw water is abstracted from Lough Derg and undergoes treatment at the Coolbawn Water Treatment Plant.<sup>25</sup> As identified by Uisce Éireann, there is capacity available to meet projected population growth up to 2031, although an improvement to the level of service is required.<sup>26</sup>

<sup>20</sup> <https://www.epa.ie/publications/compliance--enforcement/waste-water/priority-areas-list-current.php>

<sup>21</sup> [https://www.water.ie/docs/aers/2022/D0027-01\\_2022\\_AER.pdf](https://www.water.ie/docs/aers/2022/D0027-01_2022_AER.pdf)

<sup>22</sup> Uisce Éireann maintain a capacity register for all waste water treatment system and water supply systems which are updated periodically and can be viewed at [www.water.ie/connections/developer-services/capacity-registers/](http://www.water.ie/connections/developer-services/capacity-registers/)

<sup>23</sup> Nenagh Local Area Plan 2024-2030

<sup>24</sup> A Water Resource Zone (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>25</sup> Nenagh Local Area Plan 2024-2030

<sup>26</sup> Capacity Available to meet 2032 population targets - Level of service (LoS) improvement required. Leakage reduction and/or capital investment will be required to maintain/improve levels of service as demand increases. These proposals will be developed and prioritised through the National Water Resources Plan and investment planning process. Available: <https://www.water.ie/connections/developer-services/capacity-registers/water-supply-capacity-register/tipperary/> (published in June 2023).



Under Section 58 of the Environmental Protection Agency 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 that are supported by Remedial Action Lists (RALs). The RAL identifies water supplies that are not in compliance with the Regulations mentioned above. The Nenagh Regional Water Supply, serving the Plan area, was included on the most recent EPA Remedial Action List (Q4 of 2022, published in February 2023)<sup>27</sup> due to elevated levels of trihalomethanes above the standard in the Drinking Water Regulations.

### **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 County Council.

There are three Region Waste Management Plans in Ireland and these will be replaced by a new National Waste Management Plan for a Circular Economy, which will take account of the various measures outlined in A Waste Action Plan for A Circular Economy - Ireland's National Waste Policy 2020-2025.

### **Transport**

Nenagh is strategically located near several well served transport links, including the M7, which bypasses the town and provides links to Limerick, Dublin and the rest of the Country. The N52 also bypasses the town, and provides access to Birr, Athlone and Tullamore. Nenagh is served by Irish Rail, with routes to Limerick, Dublin, Portlaoise and Kildare. National, regional and local roads provide vital links between the town and retail, service and employment centres throughout the County and to adjoining counties.

Bus services are provided in the town by Bus Éireann and private operators. Nenagh has inter-urban links with Limerick, Dublin and Athlone, as well as more local services to surrounding towns and villages, as well as Thurles, Roscrea, Templemore and Birr.

Nenagh is located on the main rail line (Ballybrophy to Limerick) with a rail station within walking distance of the town centre, at the south of Kenyon Street. However, train services are poor with limited services, and requiring connections to Dublin and Cork. The poor quality of services is highlighted by the very small mode share that train services provides, just 0.12% of the total mode share. The need for infrastructural improvements to the rail line to increase the commuter rail service on the Nenagh to Limerick line is recognised with the Southern RSES.

Nenagh has a relatively high reliance on the motor vehicle, though walking trips exceed the national average. A Local Transport Plan (LTP) has been integrated into the Plan to help ensure a shift towards more sustainable modes of transport.

### **Existing Problems**

The provisions of the Plan will contribute towards protection of the environment with regard to impacts arising from material assets. The provisions of infrastructure and supporting services for development, particularly water and wastewater services, is critical as capacity limitations have been identified (these are summarised above).

## **3.9 Cultural Heritage**

### **Archaeological Heritage**

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

There are various entries to the RMP within the Plan area, including: Nenagh Castle; Franciscan Abbey; Nenagh Church (at graveyard); and Nenagh Gaol.

<sup>27</sup> <https://www.epa.ie/publications/compliance--enforcement/drinking-water/annual-drinking-water-reports/epa-drinking-water-remedial-action-list-q4-of-2022.php>

Nenagh is a historic town, designated as one of six “Walled Towns” in County Tipperary. Town defences are considered to be monuments for the purposes of the National Monuments Acts 1930-2004. The Nenagh Castle is also identified as a National Monument in State Care (Guardianship).

### **Architectural Heritage**

Protected Structures within the Plan area include<sup>28</sup>: Nenagh Castle Complex (including the castle filed and gardens); Nenagh Courthouse; Riverston House; St. Mary’s of the Rosary Church; and Nenagh Railway Station. 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. The historic core of Nenagh (including Summerhill, Pearse Street, Kenyon Street, and Kickham Street/Banba Square) is designated as an Architectural Conservation Area.

### **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.

## **3.10 Landscape**

Nenagh is the largest town in North Tipperary, and lies within the heartlands of the mid-west region of Ireland. The town is located approximately 35 km to the north-east of Limerick City, 12 km to the east of Lough Derg and the River Shannon and 10 km to the north of the Silvermine Mountain range. Nenagh is well known nationally as a market town and provides services to the agricultural hinterland.

The topography of Nenagh is predominantly flat with a gentle slope up Summerhill in the north of the town. The land surrounding the Plan area is predominantly made up of agricultural and pasture land and an area of woodland to the north-west. The Nenagh River flows from the south to the north to the east of the Plan area towards Lough Derg.

There are a range of different landscapes found in the Plan area, each with varying visual and amenity values, topography, exposure levels and each containing a variety of habitats. Each landscape type has varying capacity to absorb development related to its overall sensitivity. The existing Tipperary County Development Plan 2022-2028 identifies four Universal Landscape Archetypes, which is subdivided into seven Landscape Character Types and 23 Landscape Character Areas, 63 Scenic Routes and Views and Primary and Secondary Amenity Areas within the council’s administrative area. The Landscape Character Areas in County Tipperary are also classified according to their level of sensitivity, ranging from: ‘Vulnerable’; ‘Transitional Vulnerability’; ‘Sensitive’; ‘Transitional Sensitivity’; ‘Normal’; and ‘Robust’. The Plan area is located within the ‘Urban & Fringe Areas – Nenagh Environs’ (‘Robust’ identified as the dominant sensitivity level), ‘Nenagh Corridor’ (‘Normal’ identified as the dominant sensitivity level) and ‘Borrisokane Lowlands’ (‘Transitional Sensitivity’ identified as the dominant sensitivity level) Landscape Character Area.

The Plan also recognises ‘Respecting Views/Streetscapes/Landscapes’ that are particularly important and should be given due consideration as part of the design process for new development.

### **Existing Environmental Problems**

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

## **3.11 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

<sup>28</sup> Nenagh Town & Environs Development Plan 2013-2019 Record of Protected Structures. A review of the RPS for Nenagh will be carried out in accordance with Section 55 of the Act and thereafter the TCDP, Volume 4, will set out an RPS for Nenagh including provisions and objectives for their protection.

of topics (see Table 3.1) 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.

**Table 3.1 Strategic Environmental Objectives**

Environmental Component	Guiding Principle	Strategic Environmental Objectives
<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 the County's 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 the County's 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 proposed regional and 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 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</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 to electrification of road and rail transport modes</li> <li>Encourage the transition to a zero-carbon economy by facilitating the development of a grid infrastructure to support renewables and international connectivity. Reduce the average energy consumption per capita including promoting energy efficient buildings, retrofitting, smart- buildings, 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 and move closer to WHO recommended levels</li> </ul>
<b>Climatic Factors</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 County'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	<ul style="list-style-type: none"> <li>Protect places, features, buildings and landscapes of cultural, archaeological or architectural heritage</li> </ul>
<b>Landscape</b>	Protect and enhance the landscape character	<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>

## 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. Summaries of the alternatives for the Plan and their assessment are provided below.

### 4.2 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 significantly limited by the provisions of higher-level planning objectives, including those of the National Planning Framework (NPF), the Regional Spatial and Economic Strategy (RSES) for the Southern Region and the County Development Plan. These documents set out various requirements for the content of the Plan including on topics such as land use zoning and population projections.

### 4.3 Type 1 Alternatives: Town Centre First Approach

**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, or proposed to be linked via LTP active travel measures, with the town centre 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 north and south of the town.

**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 National Planning Framework, 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, or proposed to be linked via LTP active travel measures, 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.

This alternative would strengthen the town centre and reduce pressure for expansion into greenfield out of town sites, whilst at the same time ensuring that projected growth can be delivered.

Selected Type 1 Alternative for the Plan: Alternative B.

## 4.4 Type 2 Alternatives: Infrastructure and Environmental Approach

- **Type 2 Alternative A:** A Plan that deeply embeds the principles of infrastructural capacity, ecosystems services and strong support for a low-carbon and climate resilient economy and society.
- **Type 2 Alternative B:** A Plan that supports to a lesser degree, infrastructural capacity assessment in terms of land development, and the integration of ecosystems services and climate action led approaches to spatial planning.

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. Alternative A would fully support achieving the objectives of the NPF and RSES. An infrastructure led approach would provide a strategy for sustainable compact growth across the Plan area, contribute to carbon reduction targets and achieve environmental enhancement and economic growth.

Alternative A would ensure that the sustainable development of the town 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.

A Plan that deeply embeds the principles of infrastructural capacity, ecosystems services and strong support for a move to a low-carbon and climate resilient economy and society would provide for the:

- Support of compact development that enables active travel and efficient use of services and infrastructure as the most sustainable and low-carbon form of settlement in line with the provisions of the Climate Action Plan.
- Consideration of and protection of the role of natural systems and consideration of the services that ecosystems provide - including those that underpin social and economic well-being, such as flood and climate regulation or recreation, culture and quality of life
- Involvement and empowerment of people and communities - in decision making and in an active move to a low-carbon society.

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 (renewable and non-renewable resources, e.g. plants, animals, air, water, soils, minerals) 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;
- A decreased likelihood in the extent, magnitude and frequency of adverse effects on natural capital and ecosystem services; and
- Active support for the provisions of the National Climate Action Plan and national targets for GHG emissions.

Alternative B considers existing and future demand and capacity in infrastructure, but the allocation of growth and associated climate action policy responses are looser than under Alternative A. Decisions relating to infrastructure assessment are left to project level wherever this is possible. Climate action is supported, but not to the same degree as under Alternative A.

Alternative B would benefit the efficient provision of infrastructure, climate action and the environment (including water, human health, ecology and air/climate) the least and would provide reduced levels of

certainty and coherence to both decision makers and stakeholders, including residents and potential developers. Applications for developments would be less likely to be successful, and residual adverse effects would be more likely. Taking a less supportive infrastructure led approach would not contribute towards achieving policy objectives of the RSES or NPF to the same degree as Alternative A.

Under Alternative B, many natural capital and ecosystem service issues would be integrated into individual Plan Policy Objectives and into decision making at lower tiers of plan preparation and development management. However, this approach would be less coordinated and comprehensive than would be the case under Alternative A. This would mean that there would be:

- A decreased likelihood in the extent, magnitude and frequency of positive effects occurring with regard to natural capital and ecosystem service issues;
- An increased likelihood in the extent, magnitude and frequency of adverse effects on natural capital and ecosystem services; and
- A decreased likelihood of compliance with the provisions of the National Climate Action Plan and national targets for GHG emissions.

Selected Type 2 Alternative for the Plan: Alternative A.

## 4.5 Type 3 Alternatives: Area Based Transport Assessment Alternatives

- **Type 3 Alternative A:** Inform the Plan with an Area Based Transport Assessment, which focuses on delivering travel solutions that support moving people from the private car to more sustainable modes.
- **Type 3 Alternative B:** Do not inform the Plan with an Area Based Transport Assessment, which focuses on delivering travel solutions that support moving people from the private car to more sustainable modes, relying solely on existing provisions, including those included as part of the County Development Plan. The Development Plan policy objectives are also focused on the Avoid-Shift-Improve approach, but specific interventions for Nenagh are not set out in detail.

Informing the Plan with an Area Based Transport Assessment, which focuses on delivering travel solutions that support moving people from the private car to more sustainable modes, (**Area Based Transport Assessment Alternative A**) would provide a more coordinated and more orderly provision of transport infrastructure and services, with delivery of projects, and associated benefit with respect to sustainable mobility and compact development, more likely. This approach would be more likely to improve the potential for meeting important objectives relating to emissions and energy use. Potentially adverse impacts arising from more coherently planned transport developments on environmental components, including ecology and water, could be mitigated at both LAP and project level.

Not informing the Plan with an Area Based Transport Assessment, which focuses on delivering travel solutions that support moving people from the private car to more sustainable modes, (**Area Based Transport Assessment Alternative B**) would provide a less coordinated and less orderly provision of transport infrastructure and services, with delivery of projects, and associated benefit with respect to sustainable mobility and compact development, less likely. This approach would be less likely to improve the potential for meeting important objectives relating to emissions and energy use. Potentially adverse impacts on environmental components including ecology and water would need to be adequately mitigated at project level.

Selected Area Based Transport Assessment Alternative for the Plan: Alternative A

## 4.6 Type 4 Alternatives: Transport Infrastructure Alternatives

Under **Transport Infrastructure Alternative A**, new transport infrastructure would be considered subject to environmental constraints, including those related to habitats and potential impacts (e.g. disturbance from lighting). This would include minimising river crossings, avoiding sensitive habitats, not increasing barriers to flood waters and sustainable design and construction techniques. By focusing on mitigation at both plan and project levels, Alternative A would offer the most certainty for environmental protection and management and would be more likely to result in important individual projects (relating to sustainable mobility and emissions/energy objectives) receiving permission.

Under **Transport Infrastructure Alternative B**, all additional environmental mitigation would be left to be defined in the future, at project level. This would offer the least certainty for environmental protection and management and would be more likely to result in important individual projects (relating to sustainable mobility and emissions objectives) not been given permission.

Selected Transport Infrastructure Alternative for the Plan: Alternative A

## 4.7 Selected Alternatives

Selected alternatives for the Plan from each of the types of alternatives that emerged from the planning/SEA process are indicated above.

These alternatives have been adopted by the Members having regard to both:

1. The environmental effects which were identified by the SEA and are detailed above; and
2. Planning - including social and economic - effects that also were considered by the Members.

## Section 5 Summary of Effects arising from Plan

Table 5.1 summarises the overall environmental effects arising from 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, taking into account mitigation integrated into both the Plan and the Tipperary County Development Plan 2022-2028 – see Section 6.

Environmental impacts which occur will be determined by the nature and extent of multiple or individual projects and site-specific environmental factors. Environmental impacts which occur will be determined by the nature and extent of multiple or individual projects and site-specific environmental factors.

Appropriate Assessment (AA) Screening and Stage 2 AA have been undertaken alongside the preparation of the Plan. The requirement for AA is provided under the EU Habitats Directive (Directive 1992/43/EEC). As part of the AA Screening process, the Council determined that it could not be excluded, on the basis of objective information, that the emerging Draft Plan, individually, or in combination with other plans and projects would have a likely adverse effect on the integrity of a European Site. Therefore, Stage 2 AA was determined as being required. The findings of the Stage 2 AA is that, following the application of mitigation, the Plan will not affect the integrity of the European Sites, alone or in combination with other plans or projects.<sup>29</sup>

A Strategic Flood Risk Assessment (SFRA) document accompanies the SEA Environmental Report and the Plan. Requirements in relation to SFRA are provided under 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (Department of Environment and Office of Public Works, 2009) and associated Department of the Environment, Community and Local Government Circular PL2/2014. Flood risk management and drainage provisions are already in force through the Tipperary County Development Plan 2022-2028 and related provisions have been integrated into the LAP.

---

<sup>29</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.



**Table 5.1 Overall Findings – Environmental Effects arising from Plan Provisions**

Environmental Component	Environmental Effects, in combination with the wider planning framework		
	Effects include in-combination effects that are planned for through the wider planning framework including the NPF and associated NDP, the Southern RSES, the Tipperary County Development Plan 2022-2028, adjacent Development Plans and lower-tier land use plans.		
	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non-Significant Effects
<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 Plan area's existing built-up footprint) 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 County and beyond.</li> <li>Contribution towards the maintenance of existing green infrastructure and associated ecosystem services, listed species, ecological connectivity and non-designated habitats.</li> <li>Contribution towards protection and/or maintenance of biodiversity and flora and fauna by contributing towards the protection of natural capital including the environmental vectors of air, water and soil. Biodiversity and flora and fauna includes biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species (including birds and bats), listed/protected species, ecological connectivity and non-designated habitats (including terrestrial and aquatic habitats), and disturbance to biodiversity and flora and fauna – including terrestrial and aquatic biodiversity and flora and fauna.</li> <li>Sustains existing sustainable rural management practices – and the communities who support them – to ensure the continuation of long-established managed landscapes and the flora and fauna that they contain.</li> </ul>	<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 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 and environmental protection and management.</li> <li>Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands (including those within and adjacent to the Plan area's existing built-up footprint) 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 County and beyond.</li> <li>Contribution towards the protection of human health by facilitating development of lands (including those within and adjacent to the Plan area's existing built-up footprint) 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 County and beyond.</li> <li>Contributes towards protection of human health as a result of contributing towards the protection of natural capital including environmental vectors, including air and water.</li> </ul>	<ul 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>	<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>

SEA Environmental Report Appendix II: Non-Technical Summary

Environmental Component	Environmental Effects, in combination with the wider planning framework		
	Effects include in-combination effects that are planned for through the wider planning framework including the NPF and associated NDP 2018, the Southern RSES, the Tipperary County Development Plan 2022-2028, adjacent Development Plans and lower-tier land use plans.		
	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non-Significant Effects
<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 (including those within and adjacent to the Plan area's existing built-up footprint) 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 County and beyond.</li> <li>Contribution towards the protection of the environment from contamination the highest standards of remediation, and where appropriate to consultations with the EPA and other relevant bodies, will be required to resolve any instances of environmental pollution created by contaminated land.</li> </ul>	<ul 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>	<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 (including those within and adjacent to the Plan area's existing built-up footprint) 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 County 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 (including those within and adjacent to the Plan area's existing built-up footprint) 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 County 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> </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>	<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>

SEA Environmental Report Appendix II: Non-Technical Summary

Environmental Component	Environmental Effects, in combination with the wider planning framework		
	Effects include in-combination effects that are planned for through the wider planning framework including the NPF and associated NDP 2018, the Southern RSES, the Tipperary County Development Plan 2022-2028, adjacent Development Plans and lower-tier land use plans.		
	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non-Significant Effects
<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 (including those within and adjacent to the Plan area's existing built-up footprint) 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 County 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.</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 within the town.</li> <li>Contributes towards protection of cultural heritage within the town by facilitating brownfield development and regeneration.</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.</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:

- Strategic work undertaken by the Council to ensure contribution towards environmental protection and sustainable development<sup>30</sup>;
- Considering alternatives for the Plan<sup>31</sup>;
- The integration of environmental considerations into the zoning provisions of the Plan<sup>32</sup>;
- The integration of individual SEA, AA and SFRA provisions into the text of the Plan; and
- The integration of individual provisions into the text of the County Development 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.

Given the position of the Local Area Plan in the land use planning hierarchy beneath the Tipperary County Development Plan 2022-2028, the measures identified in that County Development Plan SEA have been used as they are or having been slightly modified – in most instances. This consistency across the hierarchy of land use plans will improve the efficiency and effectiveness of future monitoring.

Monitoring indicators, targets, sources and remedial action is provided at Table 6.1. These measures can be considered and used as appropriate when it comes to monitoring the likely significant effects of implementing the Plan. The indicators may be updated over time, as new requirements and information emerge, for example. Reporting may be undertaken in conjunction with the monitoring reporting on other plans, such as the County Development Plan and other Local Area Plans.

<sup>30</sup> In advance of the placing of the Draft Plan on public display, Tipperary County Council undertook various works in order to inform the preparation of the Plan. This included a detailed population analysis and preparation of a Local Transport Plan and Serviced Land Assessment, which have informed and are appended to the Plan.

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

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

<sup>31</sup> Although strategic alternatives in relation to the content of the Plan were guided by higher level planning objectives, 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>32</sup> Environmental considerations, including those relating to sustainable and compact growth, sustainable mobility, sustainable infrastructure, flood risk and ecology, were integrated into the Plan's zoning provisions through an interdisciplinary approach. The Plan's land use zoning seeks to achieve sustainable and compact growth, taking into account the various requirements set out in the higher-level NPF, Southern RSES and Tipperary County Development Plan 2022-2028.

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

Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action
<b>Biodiversity, Flora and Fauna</b>	BFF	<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>DHLGH report of the implementation of the measures contained in the Habitats Directive - as required by Article 17 of the Directive (every 6 years)<sup>33</sup></li> <li>DHLGH National Birds Directive Monitoring Report for the under Article 12 (every 6 years)<sup>34</sup></li> <li>Consultations with the NPWS<sup>35</sup></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 DHLGH 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>
		<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 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>Internal review of local land use plans</li> </ul>	<ul style="list-style-type: none"> <li>Review internal systems</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>Internal monitoring of preparation of local land use plans</li> </ul>	<ul style="list-style-type: none"> <li>Review internal systems</li> </ul>
		<ul style="list-style-type: none"> <li>Status of water quality in the County'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>Included under Water below</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 fauna – from County Development Plan and Local Area Plan</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 – from County Development Plan and Local Area Plan</li> </ul>	<ul style="list-style-type: none"> <li>Internal monitoring of likely significant environmental effects of grants of permission<sup>36</sup></li> </ul>	<ul style="list-style-type: none"> <li>Review internal systems</li> </ul>

<sup>33</sup>Including confirmation with development management that the following impacts have been considered and including use of monitoring data, where available: biodiversity/habitat loss; nitrogen deposition impacts on Natura 2000 sites; recreational disturbance resulting from implementation of tourism and recreation policies and objectives particularly in riparian areas; biodiversity enhancement; and disturbance /visitor pressure impacts of recreation, amenity and tourism development.

<sup>34</sup>Including confirmation with development management that the following impacts have been considered and including use of monitoring data, where available: biodiversity/habitat loss; nitrogen deposition impacts on Natura 2000 sites; recreational disturbance resulting from implementation of tourism and recreation policies and objectives particularly in riparian areas; biodiversity enhancement; and disturbance /visitor pressure impacts of recreation, amenity and tourism development.

<sup>35</sup>Including confirmation with development management that the following impacts have been considered and including use of monitoring data, where available: biodiversity/habitat loss; nitrogen deposition impacts on Natura 2000 sites; recreational disturbance resulting from implementation of tourism and recreation policies and objectives particularly in riparian areas; biodiversity enhancement; and disturbance /visitor pressure impacts of recreation, amenity and tourism development.

<sup>36</sup>Including confirmation with development management that the following impacts have been considered and including use of monitoring data, where available: biodiversity/habitat loss; nitrogen deposition impacts on Natura 2000 sites; recreational disturbance resulting from implementation of tourism and recreation policies and objectives particularly in riparian areas; biodiversity enhancement; and disturbance /visitor pressure impacts of recreation, amenity and tourism development.

SEA Environmental Report Appendix II: Non-Technical Summary

Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action
<b>Population and Human Health</b>	PHH	<ul style="list-style-type: none"> <li>Implementation of Plan measures relating to the promotion of economic growth as provided for by County Development Plan and Local Area Plan</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 County Development Plan and Local Area Plan</li> <li>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 review of progress on implementing Plan objectives</li> <li>Consultations with DECC</li> </ul>	<ul style="list-style-type: none"> <li>Review internal systems</li> <li>Consultations with DECC</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>Consultations with the Health Service Executive and EPA</li> </ul>	<ul style="list-style-type: none"> <li>Consultations with the Health Service Executive and EPA</li> </ul>
		<ul style="list-style-type: none"> <li>Proportion of people reporting regular cycling / walking to school and work above previous 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 previous CSO figures</li> </ul>	<ul style="list-style-type: none"> <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 proportion of population shows increase in private car use above previous CSO figures, the Council will coordinate with the Regional Assembly, the DHLGH, DECC and NTA to develop a tailored response.</li> </ul>
		<ul style="list-style-type: none"> <li>Number of spatial plans 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>	<ul style="list-style-type: none"> <li>Internal review of local land use plans</li> </ul>	<ul style="list-style-type: none"> <li>Review internal systems</li> </ul>
<b>Soil (and Land)</b>	S	<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 and infill land parcels across the Plan area's existing built-up footprint</li> </ul>	<ul style="list-style-type: none"> <li>EPA Geoportal</li> <li>Compilation of greenfield and brownfield development for the DHLGH</li> <li>AA/Screening for AA for each application</li> </ul>	<ul style="list-style-type: none"> <li>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.</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>Internal review of grants of permission where contaminated material must be disposed of</li> </ul>	<ul style="list-style-type: none"> <li>Consultations with the EPA and Development Management</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>	<ul style="list-style-type: none"> <li>Internal monitoring of grants of permission</li> </ul>	<ul style="list-style-type: none"> <li>Review internal systems</li> </ul>

SEA Environmental Report Appendix II: Non-Technical Summary

Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action
<b>Water</b>	<b>W</b>	<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</li> </ul>	<ul style="list-style-type: none"> <li>EPA Monitoring Programme for WFD compliance <sup>37</sup></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> </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>	<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 planning applications are being permitted on flood zones, the Council will ensure that such grants are in compliance with the Flood Risk Management Guidelines and include appropriate flood risk mitigation and management measures.</li> </ul>
<b>Material Assets</b>	<b>MA</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> </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> <li>See also targets relating to greenfield and brownfield development of land under Soil and broadband under Population and Human Health</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</li> <li>DHLGH in conjunction with Local Authorities</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> </ul>
		<ul style="list-style-type: none"> <li>Proportion of people reporting regular cycling / walking to school and work above previous 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 previous CSO figures</li> </ul>	<ul style="list-style-type: none"> <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 proportion of population shows increase in private car use above previous CSO figures, the Council will coordinate with the Regional Assembly, the DHLGH, DECC and NTA to develop a tailored response.</li> </ul>

<sup>37</sup> Including monitoring of water quality and nitrogen deposition due to bioenergy and agricultural projects where available.

SEA Environmental Report Appendix II: Non-Technical Summary

Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action
<b>Air</b>	<b>A</b>	<ul style="list-style-type: none"> <li>Proportion of journeys made by private fossil fuel-based car compared to previous National Travel Survey levels</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 previous 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</li> </ul>	<ul style="list-style-type: none"> <li>Where proportion of population shows increase in private car use above previous CSO 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>38</sup>	<b>C</b>	<ul style="list-style-type: none"> <li>Implementation of County Development Plan and Local Area Plan measures relating to climate reduction targets</li> </ul>	<ul style="list-style-type: none"> <li>For review of progress on implementing County Development Plan and Local Area Plan objectives to demonstrate successful implementation of measures relating to climate reduction targets, including renewable energy production</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>Review internal systems</li> </ul>
		<ul style="list-style-type: none"> <li>A competitive, low-carbon, climate-resilient and environmentally sustainable economy</li> </ul>	<ul style="list-style-type: none"> <li>Contribute towards transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050</li> </ul>	<ul style="list-style-type: none"> <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)</li> </ul>	<ul style="list-style-type: none"> <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> </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 reduction targets of 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>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 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> </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 previous levels</li> </ul>	<ul style="list-style-type: none"> <li>Decrease in the proportion of journeys made by residents of the County using private fossil fuel-based car compared to previous levels</li> </ul>		
		<ul style="list-style-type: none"> <li>Proportion of people reporting regular cycling / walking to school and work above previous 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 previous CSO figures</li> </ul>	<ul style="list-style-type: none"> <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 proportion of population shows increase in private car use above previous CSO figures, the Council will coordinate with the Regional Assembly, the DHLGH, DECC and NTA to develop a tailored response.</li> </ul>

<sup>38</sup> Please also refer to relevant legislation and requirements under Section 4.10, Section 8.7 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.



SEA Environmental Report Appendix II: Non-Technical Summary

Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action
<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> </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>Internal monitoring of likely significant environmental effects of grants of permission</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>
		<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>	<ul style="list-style-type: none"> <li>Consultation with DHLGH</li> </ul>	
<b>Landscape</b>	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>

# APPROPRIATE ASSESSMENT CONCLUSION STATEMENT

---

## FOR THE NENAGH AND ENVIRONS LOCAL AREA PLAN 2024-2030

**for: Tipperary County Council**

Civic Offices  
Nenagh  
County Tipperary



Comhairle Contae Thiobraid Árann  
Tipperary County Council

**by: CAAS Ltd.**

1<sup>st</sup> Floor  
24-26 Ormond Quay Upper  
Dublin 7



**MARCH 2024**

# Table of Contents

<b>Section 1</b>	<b>Introduction and Background .....</b>	<b>1</b>
1.1	Introduction.....	1
1.2	Legislative Requirements in relation to AA .....	1
1.3	AA Conclusion Statement.....	1
<b>Section 2</b>	<b>How the findings of the AA were factored into the Plan.....</b>	<b>3</b>
<b>Section 3</b>	<b>Consideration of Alternatives .....</b>	<b>7</b>
3.1	Limitations in Available Alternatives.....	7
3.2	Type 1 Alternatives: Town Centre First Approach .....	7
3.3	Type 2 Alternatives: Infrastructure and Environmental Approach.....	8
3.4	Type 3 Alternatives: Area Based Transport Assessment Alternatives.....	9
3.5	Type 4 Alternatives: Transport Infrastructure Alternatives.....	10
<b>Section 4</b>	<b>AA Determination .....</b>	<b>11</b>

## List of Tables

Table 1.1	Matters taken into account by the AA .....	1
Table 2.1	Measures included in the Local Area Plan that will protect European sites and their sustaining resources .....	3

# Section 1 Introduction and Background

## 1.1 Introduction

This is the Appropriate Assessment (AA) Conclusion Statement for the Nenagh and Environs Local Area Plan. The obligation to undertake AA derives from Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC as transposed into Irish legislation by, inter alia, the Planning and Development Act 2000, as amended. 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 any European Site in view of its conservation objectives. This AA Conclusion Statement should be read in conjunction with the Plan and associated documents including the AA Natura Impact Report (NIR).

## 1.2 Legislative Requirements in relation to AA

In carrying out the AA for the Plan, Planning and Development Act 2000, as amended, requires, inter alia, that the Council considers the matters arrayed in the first column on Table 1.1 below. The second column identifies how these issues have been addressed.

**Table 1.1 Matters taken into account by the AA**

Matter specified by the Regulations	How addressed by AA
(a) the Natura Impact Report	An AA NIR accompanies this AA Conclusion Statement and the Plan.
(b) any supplemental information furnished in relation to any such report	This AA Conclusion Statement accompanies the NIR that provides additional detail on European Sites.
(c) if appropriate, any additional information sought by the authority and furnished by the applicant in relation to a Natura Impact Report	
(d) any information or advice obtained by the public authority	Submissions made during the Plan preparation/AA process resulted in updates being made to the Plan that resulted in updates being made to the AA NIR.
(e) if appropriate, any written submissions or observations made to the public authority in relation to the application for consent for proposed plan or project	Proposed Material Alterations were screened for the need to undertake Stage 2 AA (Stage 2 AA was not required for the Alterations).
(f) any other relevant information	

In addition to the above, the Regulations require that the Council makes available for inspection a determination regarding the outcome of the assessment with respect to whether or not the Plan would adversely affect the integrity of a European site (a copy of this determination is provided at Section 4).

## 1.3 AA Conclusion Statement

Non-Statutory AA guidance (Department of Environment, Heritage and Local Government, 2009) states that (Section 4.14) it *"is recommended that planning authorities include a clear and discrete AA Conclusion Statement as a distinct section in the written statement of the plan separate to the SEA statement."* This guidance recommends that the following issues are addressed by the AA Conclusion Statement:

- Summary of how the findings of the AA were factored into the Plan (see Section 2);
- Reasons for choosing the Plan as adopted, in the light of other reasonable alternatives considered as part of the AA process (see Section 3);
- A declaration that the Plan as adopted will not have an adverse effect on the integrity of European Sites (provided at Section 4); and
- The NIR (the AA NIR is accompanied by this AA Conclusion Statement and has informed the AA Determination – see Section 4).

Furthermore, as stated in the Draft "Development Plans Guidelines for Planning Authorities" (Department of Housing, Local Government and Heritage, 2021):

*"... There is a similar requirement to publish a determination relating to the AA that may have been undertaken. Under Article 6.3 of the Habitats Directive the determination (often termed an 'AA Conclusion Statement') must state as to whether or not the Draft Plan would adversely affect the integrity of a European site. However as stated in Section 3.5, this determination must have been made prior to the adoption of the Draft Plan."*

This AA Conclusion Statement addresses the above issues, including the signed AA Determination included at Section 4.

## Section 2 How the findings of the AA were factored into the Plan

The SEA and AA team worked with the Plan-preparation team at the Council in order to integrate requirements for environmental protection and management into the Plan.

The Plan was prepared in an iterative manner whereby the Plan and AA documents have informed subsequent versions of the other. The findings of the AA were integrated into the Plan through mitigation measures. These mitigation measures ensure that the Plan will not affect the integrity of the European Sites, alone or in combination with other plans or projects.<sup>1</sup> The mitigation measures included in the Local Area Plan that most relevant to the protection of European sites are identified in Table 2.1 below. Also included are relevant measures from the higher-level County Development Plan.

**Table 2.1 Measures included in the Local Area Plan that will protect European sites and their sustaining resources<sup>2</sup>**

Sources and/or pathways for potential significant effects <sup>3</sup>	Development Objectives / Mitigation Measure(s)
Natural Heritage and Biodiversity	<p><b>Policy 7.1:</b> Protect and conserve the integrity and ecological and biodiversity value of the Nenagh and Ollatrim Rivers as they run 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><b>Policy 7.3:</b></p> <p>a) Support the retention of trees of significant amenity value and require public realm proposals to include for urban greening that is appropriate to the character of the area, provides for urban shading, supports biodiversity and provides an appropriate visual setting.</p> <p>b) Support the removal of mature trees, or trees of significant amenity value, only where it can be demonstrated that the loss of the tree(s) is outweighed by the wider public benefits of the proposal.</p> <p>c) Require development proposals which affect trees of significant amenity value to identify trees to be retained, and methods for the protection of those trees to be retained during and post-construction to be set out within development proposals.</p> <p>d) Require new development proposals to incorporate the provision of trees, in accordance with the requirements of Section 3.7 of the Development Management standards of the TCDP.</p> <p><b>Objective 8B:</b> 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.</p> <p><b>Objective 7A:</b> Support and work with the local community, and other stakeholders in the development of blue and green infrastructure in the town, including the development of the Nenagh River Greenway, and in the enhancement of the biodiversity and conservation value of the river corridor.</p> <p><b>Amenity:</b> To provide, preserve and enhance open space, biodiversity and amenity uses. Protect sensitive, biodiverse, riverine and scenic locations from development that would adversely affect the environmental quality/sensitivity of these areas.</p> <p><b>Policy 1.1 / Alignment with and adherence to the policies and objectives contained within the Tipperary County Development Plan 2022-2028:</b> Assess all new development proposals within the boundary of the Nenagh and Environs Local Area Plan 2024-2030 in accordance with the policies, objectives and requirements of the Tipperary County Development Plan 2022-2028 (and any review thereof), and this Plan. Where conflicts arise, the Tipperary County Development Plan 2022-2028 (and any review thereof) shall have primacy in decision-making<sup>4</sup>.</p> <p><b>Objective 10A:</b> Undertake a programme of monitoring and evaluation of the LAP over its lifetime in accordance with the monitoring framework, set out in Section 10.2 and in accordance with the methodology prepared for the TCDP 2022.</p>
Peatlands, wetlands and surface water courses	<p><b>Policy 7.1:</b> Protect and conserve the integrity and ecological and biodiversity value of the Nenagh and Ollatrim Rivers as they run 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><b>Policy 1.1 / Alignment with and adherence to the policies and objectives contained within the Tipperary County Development Plan 2022-2028:</b> Assess all new development proposals within the boundary of the Nenagh and Environs Local Area Plan 2024-2030 in accordance with the policies, objectives and requirements of the Tipperary County Development Plan 2022-2028 (and</p>

<sup>1</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.

<sup>2</sup> Note that non-material changes to individual Plan provisions referenced in this report may be updated during the finalisation of the Plan, including numbering, formatting and graphic design.

<sup>3</sup> The measures generally benefit multiple environmental components i.e., a measure providing for the protection of water could beneficially impact upon the protection of biodiversity, flora and fauna, for example. All of the measures included in this table would benefit the protection of European sites.

<sup>4</sup> Provisions from the County Development Plan identified as mitigation in the SEA Environmental Report and Natura Impact Report shall apply regardless of whether the County Development Plan is varied and/or reviewed and/or expires.

Sources and/or pathways for potential significant effects <sup>3</sup>	Development Objectives / Mitigation Measure(s)
	<p>any review thereof), and this Plan. Where conflicts arise, the Tipperary County Development Plan 2022-2028 (and any review thereof) shall have primacy in decision-making<sup>5</sup>.</p> <p><b>Objective 10A:</b> Undertake a programme of monitoring and evaluation of the LAP over its lifetime in accordance with the monitoring framework and methodology prepared for the TCDP 2022.</p>
<p>Water services, groundwater and water quality (*WFD)</p>	<p><b>Policy 8.2:</b> Support the sustainable and efficient use of existing capacity in water services, permit new connections to the Nenagh public and waste water supply and safeguard the integrity of the waste water network. Where local network upgrades are required, to ensure that capacity is provided to individual sites in accordance with the Uisce Éireann Connections Charging Policy and Uisce Éireann's Connections and Developer Service.</p> <p><b>Policy 8.4:</b> Require that all development proposals in Nenagh integrate SUDS and nature-based solutions to SUDS as part of an overall sustainable urban drainage and urban greening approach (refer also to Section 3.5 of the accompanying SFRA, "Sustainable Urban Drainage Systems and Surface Water Guidance and Strategy"), unless they are demonstrated to be operationally unfeasible to the satisfaction of the Council.</p> <p><b>Objective 8A:</b> Continually progress, in conjunction with Uisce Éireann, water supply and sewer rehabilitation activities, extension of the municipal waste water network, capital maintenance activities, and to continue to monitor the performance of the networks to ensure that the most urgent works are prioritised as required.</p> <p><b>Policy 8.6:</b> Support the upgrade of the Nenagh Waste Water Treatment Plant and require new development proposals to safeguard the strategic function of the plant.</p> <p><b>Policy 1.1 / Alignment with and adherence to the policies and objectives contained within the Tipperary County Development Plan 2022-2028:</b> Assess all new development proposals within the boundary of the Nenagh and Environs Local Area Plan 2024-2030 in accordance with the policies, objectives and requirements of the Tipperary County Development Plan 2022-2028 (and any review thereof), and this Plan. Where conflicts arise, the Tipperary County Development Plan 2022-2028 (and any review thereof) shall have primacy in decision-making<sup>6</sup>.</p> <p><b>Objective 10A:</b> Undertake a programme of monitoring and evaluation of the LAP over its lifetime in accordance with the monitoring framework and methodology prepared for the TCDP 2022.</p>
<p>Tourism</p>	<p><b>Policy 4.4:</b> Support 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.</p> <p><b>Policy 4.5:</b> Support new tourism-based development which enhances employment opportunities, the quality of the environment and contributes to the visitor experience of Nenagh in accordance with the principles of the 'Lough Derg Visitor Experience Development Plan 2020-2024'.</p> <p><b>Objective 4D:</b> Work with project partners, including Fáilte Ireland and the OPW to develop the Nenagh Historical and Cultural Quarter of the 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.</p> <p><b>Policy 1.1 / Alignment with and adherence to the policies and objectives contained within the Tipperary County Development Plan 2022-2028:</b> Assess all new development proposals within the boundary of the Nenagh and Environs Local Area Plan 2024-2030 in accordance with the policies, objectives and requirements of the Tipperary County Development Plan 2022-2028 (and any review thereof), and this Plan. Where conflicts arise, the Tipperary County Development Plan 2022-2028 (and any review thereof) shall have primacy in decision-making<sup>7</sup>.</p> <p><b>Objective 10A:</b> Undertake a programme of monitoring and evaluation of the LAP over its lifetime in accordance with the monitoring framework and methodology prepared for the TCDP 2022.</p>
<p>Built environment</p>	<p><b>Policy 2.5:</b> Facilitate development of existing but non-conforming and long-established uses, to support their continued operation and expansion, provided such does not result in loss of amenity to adjoining properties, adverse impact on the environment, visual detriment to the character of the area or creation of a traffic hazard.</p> <p><b>Policy 2.1:</b> Require the retrofitting of existing structures on brownfield sites, unless it is demonstrated that retrofitting is unfeasible, or redevelopment of the site would provide positive carbon impact through the re-design, construction and use stages of a new building, compared with retrofitting.</p> <p><b>Policy 1.1 / Alignment with and adherence to the policies and objectives contained within the Tipperary County Development Plan 2022-2028:</b> Assess all new development proposals within the boundary of the Nenagh and Environs Local Area Plan 2024-2030 in accordance with the policies, objectives and requirements of the Tipperary County Development Plan 2022-2028 (and any review thereof), and this Plan. Where conflicts arise, the Tipperary County Development Plan 2022-2028 (and any review thereof) shall have primacy in decision-making<sup>8</sup>.</p>

<sup>5</sup> Provisions from the County Development Plan identified as mitigation in the SEA Environmental Report and Natura Impact Report shall apply regardless of whether the County Development Plan is varied and/or reviewed and/or expires.

<sup>6</sup> Provisions from the County Development Plan identified as mitigation in the SEA Environmental Report and Natura Impact Report shall apply regardless of whether the County Development Plan is varied and/or reviewed and/or expires.

<sup>7</sup> Provisions from the County Development Plan identified as mitigation in the SEA Environmental Report and Natura Impact Report shall apply regardless of whether the County Development Plan is varied and/or reviewed and/or expires.

<sup>8</sup> Provisions from the County Development Plan identified as mitigation in the SEA Environmental Report and Natura Impact Report shall apply regardless of whether the County Development Plan is varied and/or reviewed and/or expires.

Sources and/or pathways for potential significant effects <sup>3</sup>	Development Objectives / Mitigation Measure(s)
	<p><b>Objective 10A:</b> Undertake a programme of monitoring and evaluation of the LAP over its lifetime in accordance with the monitoring framework and methodology prepared for the TCDP 2022.</p>
Invasive species	<p>The management of invasive species occurrence and risk is accounted for in the Plan via alignment with and adherence to the Tipperary County Development Plan 2022-2028 policy objectives via Policy 1.1 in the Plan. This policy therefore renders any development or project resulting from the implementation of this Plan subject to compliance with policy objectives 11-8 and 11-13<sup>9</sup> of the Tipperary County Development Plan 2022-2028.</p>
Flood Risk Management	<p><b>Policy 8.5:</b> 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:                      a) 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.                      b) 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.                      c) 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.                      d) 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. Flood Risk Assessments shall apply the precautionary approach recommended in the Guidelines and shall be informed by the advice on the expected impacts of climate change and the allowances to be provided for future flood risk management provided in the OPW's (2019) Flood Risk Management Climate Change Sectoral Adaptation Plan and the guidance on potential future scenarios contained therein.                      e) 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. For the avoidance of doubt, the Office of Public Works' Preliminary Flood Risk Assessment indicative pluvial maps (2012) are not considered to be reliable for assessing pluvial risk.                      f) Any planning application within Defended Areas (refer to SFRA for more details) shall demonstrate that residual risks have been considered and include measures are for their management as appropriate.</p> <p><b>Objective 8D:</b> Support and work in co-operation with the Office of Public Works in the design, development and implementation of the Nenagh Flood Relief Scheme. To also contribute towards the protection of key flood risk infrastructure, such as the embankment at Lisbunney Industrial Estate, from interference or removal.</p> <p><b>Policy 1.1 / Alignment with and adherence to the policies and objectives contained within the Tipperary County Development Plan 2022-2028:</b> Assess all new development proposals within the boundary of the Nenagh and Environs Local Area Plan 2024-2030 in accordance with the policies, objectives and requirements of the Tipperary County Development Plan 2022-2028 (and any review thereof), and this Plan. Where conflicts arise, the Tipperary County Development Plan 2022-2028 (and any review thereof) shall have primacy in decision-making<sup>10</sup>.</p> <p><b>Objective 10A:</b> Undertake a programme of monitoring and evaluation of the LAP over its lifetime in accordance with the monitoring framework and methodology prepared for the TCDP 2022.</p>
Light, air & noise pollution	<p><b>Policy 1.1 / Alignment with and adherence to the policies and objectives contained within the Tipperary County Development Plan 2022-2028:</b> Assess all new development proposals within the boundary of the Nenagh and Environs Local Area Plan 2024-2030 in accordance with the policies, objectives and requirements of the Tipperary County Development Plan 2022-2028 (and any review thereof), and this Plan. Where conflicts arise, the Tipperary County Development Plan 2022-2028 (and any review thereof) shall have primacy in decision-making<sup>11</sup>.</p> <p><b>Objective 10A:</b> Undertake a programme of monitoring and evaluation of the LAP over its lifetime in accordance with the monitoring framework and methodology prepared for the TCDP 2022.</p>
Climate	<p><b>Policy 2.1:</b> Require the retrofitting of existing structures on brownfield sites, unless it is demonstrated that retrofitting is unfeasible, or redevelopment of the site would provide positive carbon impact through the re-design, construction and use stages of a new building, compared with retrofitting.</p> <p><b>Objective 5A:</b> 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,</p>

<sup>9</sup> Tipperary County Development Plan 2022-2028 objectives:

- 11-8 "Provide for the sustainable development of fisheries, in compliance with the Habitats and Birds Directives, and other ecological protection objectives. New infrastructure should be positioned at already modified locations where feasible; and sedimentation and siltation issues should be considered, with floating infrastructure used where feasible. Fishery related developments may necessitate the preparation of a Visitor/Habitat Management Plan that includes requirements in relation to: sustainable fishing practices that would not affect the ecological site integrity; and invasive species"; and
- 11-13 "Seek to control the spread of invasive plant and animal species, including consideration of potential pathways for invasive species spread, i.e. watercourses".

<sup>10</sup> Provisions from the County Development Plan identified as mitigation in the SEA Environmental Report and Natura Impact Report shall apply regardless of whether the County Development Plan is varied and/or reviewed and/or expires.

<sup>11</sup> Provisions from the County Development Plan identified as mitigation in the SEA Environmental Report and Natura Impact Report shall apply regardless of whether the County Development Plan is varied and/or reviewed and/or expires.



Sources and/or pathways for potential significant effects <sup>3</sup>	Development Objectives / Mitigation Measure(s)
	<p>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.</p> <p><b>Policy 6.1:</b> Support new development that will improve accessibility and movement within Nenagh, 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.</p> <p><b>Policy 8.1:</b> Support the use of renewable energy technologies at appropriate scales in residential, commercial and community developments and support the principle of on-site energy generation for self-consumption.</p> <p><b>Policy 1.1 / Alignment with and adherence to the policies and objectives contained within the Tipperary County Development Plan 2022-2028:</b> Assess all new development proposals within the boundary of the Nenagh and Environs Local Area Plan 2024-2030 in accordance with the policies, objectives and requirements of the Tipperary County Development Plan 2022-2028 (and any review thereof), and this Plan. Where conflicts arise, the Tipperary County Development Plan 2022-2028 (and any review thereof) shall have primacy in decision-making<sup>12</sup>.</p> <p><b>Objective 10A:</b> Undertake a programme of monitoring and evaluation of the LAP over its lifetime in accordance with the monitoring framework and methodology prepared for the TCDP 2022.</p>
Green / Blue Infrastructure	<p><b>Policy 7.2:</b> Support the development of a greenway along the Nenagh river, subject to planning, design and environment criteria and assessment</p> <p><b>Objective 7A:</b> Support and work with the local community, and other stakeholders in the development of blue and green infrastructure in the town, including the development of the Nenagh River Greenway, and in the enhancement of the biodiversity and conservation value of the river corridor.</p> <p><b>Policy 1.1 / Alignment with and adherence to the policies and objectives contained within the Tipperary County Development Plan 2022-2028:</b> Assess all new development proposals within the boundary of the Nenagh and Environs Local Area Plan 2024-2030 in accordance with the policies, objectives and requirements of the Tipperary County Development Plan 2022-2028 (and any review thereof), and this Plan. Where conflicts arise, the Tipperary County Development Plan 2022-2028 (and any review thereof) shall have primacy in decision-making<sup>13</sup>.</p> <p><b>Objective 10A:</b> Undertake a programme of monitoring and evaluation of the LAP over its lifetime in accordance with the monitoring framework and methodology prepared for the TCDP 2022.</p>
Waste Management	<p><b>Objective 8C:</b> Support the sustainable management of waste and enable a significant reduction in the production of waste in Nenagh, in line with the principles of the Waste Action Plan for a Circular Economy (DECC, 2021).</p> <p><b>Policy 1.1 / Alignment with and adherence to the policies and objectives contained within the Tipperary County Development Plan 2022-2028:</b> Assess all new development proposals within the boundary of the Nenagh and Environs Local Area Plan 2024-2030 in accordance with the policies, objectives and requirements of the Tipperary County Development Plan 2022-2028 (and any review thereof), and this Plan. Where conflicts arise, the Tipperary County Development Plan 2022-2028 (and any review thereof) shall have primacy in decision-making<sup>14</sup>.</p> <p><b>Objective 10A:</b> Undertake a programme of monitoring and evaluation of the LAP over its lifetime in accordance with the monitoring framework and methodology prepared for the TCDP 2022.</p>

<sup>12</sup> Provisions from the County Development Plan identified as mitigation in the SEA Environmental Report and Natura Impact Report shall apply regardless of whether the County Development Plan is varied and/or reviewed and/or expires.

<sup>13</sup> Provisions from the County Development Plan identified as mitigation in the SEA Environmental Report and Natura Impact Report shall apply regardless of whether the County Development Plan is varied and/or reviewed and/or expires.

<sup>14</sup> Provisions from the County Development Plan identified as mitigation in the SEA Environmental Report and Natura Impact Report shall apply regardless of whether the County Development Plan is varied and/or reviewed and/or expires.

## Section 3 Consideration of Alternatives

This section summarises the alternatives considered for the Plan during the preparation process. These alternatives have been incorporated into the Plan having regard to both:

1. The environmental effects (including those related to ecology and European sites) which are identified by the SEA (informed by the AA) and are summarised below; and
2. Planning - including social and economic - effects that also were considered by the Council.

### 3.1 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 significantly limited by the provisions of higher-level planning objectives, including those of the National Planning Framework (NPF), the Regional Spatial and Economic Strategy (RSES) for the Southern Region and the County Development Plan. These documents set out various requirements for the content of the Plan including on topics such as land use zoning and population projections.

### 3.2 Type 1 Alternatives: Town Centre First Approach

**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, or proposed to be linked via LTP active travel measures, with the town centre 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 north and south of the town.

**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 National Planning Framework, 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, or proposed to be linked via LTP active travel measures, 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.

This alternative would strengthen the town centre and reduce pressure for expansion into greenfield out of town sites, whilst at the same time ensuring that projected growth can be delivered.

Selected Type 1 Alternative for the Plan: Alternative B.

### 3.3 Type 2 Alternatives: Infrastructure and Environmental Approach

- **Type 2 Alternative A:** A Plan that deeply embeds the principles of infrastructural capacity, ecosystems services and strong support for a low-carbon and climate resilient economy and society.
- **Type 2 Alternative B:** A Plan that supports to a lesser degree, infrastructural capacity assessment in terms of land development, and the integration of ecosystems services and climate action led approaches to spatial planning.

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. Alternative A would fully support achieving the objectives of the NPF and RSES. An infrastructure led approach would provide a strategy for sustainable compact growth across the Plan area, contribute to carbon reduction targets and achieve environmental enhancement and economic growth.

Alternative A would ensure that the sustainable development of the town 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.

A Plan that deeply embeds the principles of infrastructural capacity, ecosystems services and strong support for a move to a low-carbon and climate resilient economy and society would provide for the:

- Support of compact development that enables active travel and efficient use of services and infrastructure as the most sustainable and low-carbon form of settlement in line with the provisions of the Climate Action Plan.
- Consideration of and protection of the role of natural systems and consideration of the services that ecosystems provide - including those that underpin social and economic well-being, such as flood and climate regulation or recreation, culture and quality of life
- Involvement and empowerment of people and communities - in decision making and in an active move to a low-carbon society.

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 (renewable and non-renewable resources, e.g. plants, animals, air, water, soils, minerals) 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;
- A decreased likelihood in the extent, magnitude and frequency of adverse effects on natural capital and ecosystem services; and
- Active support for the provisions of the National Climate Action Plan and national targets for GHG emissions.

Alternative B considers existing and future demand and capacity in infrastructure, but the allocation of growth and associated climate action policy responses are looser than under Alternative A. Decisions relating to infrastructure assessment are left to project level wherever this is possible. Climate action is supported, but not to the same degree as under Alternative A.

Alternative B would benefit the efficient provision of infrastructure, climate action and the environment (including water, human health, ecology and air/climate) the least and would provide reduced levels of certainty and coherence to both decision makers and stakeholders, including residents and potential

developers. Applications for developments would be less likely to be successful, and residual adverse effects would be more likely. Taking a less supportive infrastructure led approach would not contribute towards achieving policy objectives of the RSES or NPF to the same degree as Alternative A.

Under Alternative B, many natural capital and ecosystem service issues would be integrated into individual Plan Policy Objectives and into decision making at lower tiers of plan preparation and development management. However, this approach would be less coordinated and comprehensive than would be the case under Alternative A. This would mean that there would be:

- A decreased likelihood in the extent, magnitude and frequency of positive effects occurring with regard to natural capital and ecosystem service issues;
- An increased likelihood in the extent, magnitude and frequency of adverse effects on natural capital and ecosystem services; and
- A decreased likelihood of compliance with the provisions of the National Climate Action Plan and national targets for GHG emissions.

Selected Type 2 Alternative for the Plan: Alternative A.

### **3.4 Type 3 Alternatives: Area Based Transport Assessment Alternatives**

- **Type 3 Alternative A:** Inform the Plan with an Area Based Transport Assessment, which focuses on delivering travel solutions that support moving people from the private car to more sustainable modes.
- **Type 3 Alternative B:** Do not inform the Plan with an Area Based Transport Assessment, which focuses on delivering travel solutions that support moving people from the private car to more sustainable modes, relying solely on existing provisions, including those included as part of the County Development Plan. The Development Plan policy objectives are also focused on the Avoid-Shift-Improve approach, but specific interventions for Nenagh are not set out in detail.

Informing the Plan with an Area Based Transport Assessment, which focuses on delivering travel solutions that support moving people from the private car to more sustainable modes, (**Area Based Transport Assessment Alternative A**) would provide a more coordinated and more orderly provision of transport infrastructure and services, with delivery of projects, and associated benefit with respect to sustainable mobility and compact development, more likely. This approach would be more likely to improve the potential for meeting important objectives relating to emissions and energy use. Potentially adverse impacts arising from more coherently planned transport developments on environmental components, including ecology and water, could be mitigated at both LAP and project level.

Not informing the Plan with an Area Based Transport Assessment, which focuses on delivering travel solutions that support moving people from the private car to more sustainable modes, (**Area Based Transport Assessment Alternative B**) would provide a less coordinated and less orderly provision of transport infrastructure and services, with delivery of projects, and associated benefit with respect to sustainable mobility and compact development, less likely. This approach would be less likely to improve the potential for meeting important objectives relating to emissions and energy use. Potentially adverse impacts on environmental components including ecology and water would need to be adequately mitigated at project level.

Selected Area Based Transport Assessment Alternative for the Plan: Alternative A

### **3.5 Type 4 Alternatives: Transport Infrastructure Alternatives**

Under **Transport Infrastructure Alternative A**, new transport infrastructure would be considered subject to environmental constraints, including those related to habitats and potential impacts (e.g. disturbance from lighting). This would include minimising river crossings, avoiding sensitive habitats, not increasing barriers to flood waters and sustainable design and construction techniques. By focusing on mitigation at both plan and project levels, Alternative A would offer the most certainty for environmental protection and management and would be more likely to result in important individual projects (relating to sustainable mobility and emissions/energy objectives) receiving permission.

Under **Transport Infrastructure Alternative B**, all additional environmental mitigation would be left to be defined in the future, at project level. This would offer the least certainty for environmental protection and management and would be more likely to result in important individual projects (relating to sustainable mobility and emissions objectives) not been given permission.

Selected Transport Infrastructure Alternative for the Plan: Alternative A

## Section 4 AA Determination



Comhairle Contae Thiobraid Árann  
Tipperary County Council

Comhairle Contae  
Thiobraid Árann,  
Oifigi Cathartha,  
Cluain Meala,  
Co. Thiobraid Árann  
Tipperary County Council,  
Civic Offices, Clonmel,  
Co. Tipperary  
E91 N512

Comhairle Contae  
Thiobraid Árann,  
Oifigi Cathartha,  
An tAonach,  
Co. Thiobraid Árann  
Tipperary County Council,  
Civic Offices, Nenagh,  
Co. Tipperary  
E45 A099

t 0818 06 5000  
e customerservice  
@tipperarycoco.ie  
tipperarycoco.ie

### Appropriate Assessment Determination

under  
Section 177V of the Planning and Development Act 2000, as amended,  
for the

### Nenagh and Environs Local Area Plan 2024-2030

In order to comply with the requirements of Section 177V of the Planning and Development Act 2000, as amended, and pursuant to Article 6(3) of the Habitats Directive as to whether or not a plan or project would affect the integrity of any European site(s), this Appropriate Assessment determination is being made by Tipperary County Council relating to the potential for the Nenagh and Environs Local Area Plan 2024-2030 that is being adopted<sup>1</sup> to have effects on the integrity of European sites.

In carrying out this Appropriate Assessment (AA), the Council is taking into account the matters specified under Part XAB of the Planning and Development Act 2000 (as amended), including the following<sup>2</sup>:

- The Natura Impact Report prepared for the Draft Plan;
- The Screening for AA Report prepared for the Proposed Material Alterations;
- Written submissions made during the Plan preparation process; and
- Ongoing advice on AA from the Council's agents.

As part of the AA, it was identified that the Plan may, if unmitigated, have significant effects on 2 (no.) European sites. Plan elements that could have a likelihood for potential significant effects to European sites include:

- The Plan's Land Use Zoning Framework, Strategies for Planning and Development, Town Centre and Economic Development, provisions relating to the development of sustainable communities, transport and connectivity, local heritage, infrastructure, energy and utilities that introduce sources for potential effects through construction phase such as habitat loss, light pollution, disturbance effects and hydrological interactions through surface hydrological connectivity or shared groundwater sources;
- Loading pressures from the operational phase of developments – these sources could result in habitat loss/fragmentation, disturbance effects, light pollution and interactions with water quality (surface and/or groundwater); and
- Increases in visitor numbers to ecologically sensitive areas during the operational phase of developments which have potential to introduce

<sup>1</sup> Incorporating: the Draft Plan; all and any alterations; and all and any further modifications considered by the AA process.

<sup>2</sup> A consolidated Natura Impact Report has also been made available, integrating relevant elements of these matters into one document.


sources for significant effects, such as recreational and tourism developments.

The undersigned, having carefully considered the information referred to above agrees with and adopts the reasoning and conclusions presented and determines that:

- Implementation of the Plan would have had the potential to result in effects to the integrity of European sites, if unmitigated.
- The risks to the safeguarding and integrity of the qualifying interests, special conservation interests and conservation objectives of the European sites have been addressed by the inclusion of mitigation measures into the Plan that will, in addition to the measures already in force through the Tipperary County Development Plan 2022-2028, prioritise the avoidance of effects in the first place and reliably mitigate effects where these cannot be avoided. In addition, any lower-level plans and projects arising through the implementation of the Plan will themselves be subject to AA when further details of design and location are known.
- In-combination effects from interactions with other plans and projects have been considered in this assessment and the mitigation measures have been incorporated into the Plan – these measures are robust and will ensure there will be no effects on the integrity of European sites as a result of the implementation of the Plan either alone or in-combination with other plans/projects.
- Having incorporated mitigation measures<sup>3</sup> and taking into account the measures already in force through the Tipperary County Development Plan 2022-2028<sup>4</sup>, the Plan is not foreseen to give rise to any effect on the integrity of any European site, alone or in combination with other plans or projects<sup>5</sup>. This evaluation is made in view of the conservation objectives of the habitats or species, for which these sites have been designated.

Signed: 

**Director of Services for Planning and Development (including Town Centre First and Just Transition), Emergency Services and Emergency Planning**

Date: 

<sup>3</sup> As detailed under the following reference numbers in the consolidated Natura Impact Report: Policy 7.1, Policy 7.3, Objective 8B, Objective 7A, Policy 1.1, Objective 10A, Policy 8.2, Policy 8.4, Objective 8A, Policy 8.6, Policy 4.4, Policy 4.5, Objective 4D, Policy 2.5, Policy 2.1, Policy 8.5, Objective 8D, Policy 2.1, Objective 5A, Policy 6.1, Policy 8.1, Policy 7.2, Objective 7A, Objective 8C.

<sup>4</sup> As detailed under the following reference numbers in the consolidated Natura Impact Report: 11-8, 11-13.

<sup>5</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.

# STRATEGIC FLOOD RISK ASSESSMENT

---

FOR THE

## NENAGH AND ENVIRONS LOCAL AREA PLAN 2024-2030

**for: Tipperary County Council**

Civic Offices  
Nenagh  
County Tipperary



**by: CAAS Ltd.**

1<sup>st</sup> Floor  
24-26 Ormond Quay Upper  
Dublin 7



**MARCH 2024**



# Table of Contents

<b>Section 1</b>	<b>Introduction and Policy Background .....</b>	<b>1</b>
1.1	Introduction .....	1
1.2	The Local Area Plan .....	1
1.3	Flood Risk and its Relevance as an Issue to the Plan.....	1
1.4	Flood Risk Management Policy.....	2
1.5	Emerging Information and Disclaimer .....	5
<b>Section 2</b>	<b>Stage 1 SFRA - Flood Risk Identification .....</b>	<b>6</b>
2.1	Introduction .....	6
2.2	Drainage, Defences and Early Warning Systems .....	6
2.3	Other Flood Studies .....	7
2.4	Flood Risk Indicators .....	7
2.5	Conclusion .....	9
<b>Section 3</b>	<b>Stage 2 SFRA - Flood Risk Assessment .....</b>	<b>10</b>
3.1	Introduction .....	10
3.2	Findings and Adequacy of Existing Information and Delineation of Flood Zones .....	10
3.3	Flood Risk Zone Mapping .....	10
3.4	Sensitivity to Climate Change .....	10
3.5	Sustainable Drainage Systems and Surface Water Guidance and Strategy .....	11
<b>Section 4</b>	<b>Flood and Drainage Provisions .....</b>	<b>14</b>
4.1	Introduction .....	14
4.2	Land Use Zoning .....	14
4.3	Integration of other provisions relating to flood risk management into the existing, already in force, Tipperary County Development Plan .....	19
4.4	Integration of other provisions relating to flood risk management into the Local Area Plan ....	22
<b>Section 5</b>	<b>Conclusion .....</b>	<b>25</b>

## Appendix I

Summary of the requirements of the Flood Guidelines for land uses in Flood Zones

## Appendix II

Selection of Flood Risk Indicator Mapping and Flood Zone Mapping

# Section 1 Introduction and Policy Background

## 1.1 Introduction

Tipperary County Council has adopted a Local Area Plan (LAP) for Nenagh under the Planning and Development Act 2000 (as amended). The Plan sets out an overall strategy for the proper planning and sustainable development of Nenagh and Environs over the years 2024-2030.

This Strategic Flood Risk Assessment (SFRA) document has been prepared alongside the LAP taking into account *The Planning System and Flood Risk Management - Guidelines for Planning Authorities* (Department of the Environment, Heritage and Local Government and Office of Public Works, 2009) and Department of the Environment, Community and Local Government Circular PL 2/2014.

## 1.2 The Local Area Plan

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

The LAP should be read in conjunction with the Tipperary County Development Plan 2022-2028, which sets out the overarching development strategy for the County. Where conflicting objectives arise between the County Development Plan and the LAP, the objectives of the relevant County Development Plan shall take precedence.

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

In addition, land use zoning contained within the Plan has been informed by the SFRA process and associated delineation of flood risk zones. The detailed Plan preparation process undertaken by the Planning Department combined with specialist input from the SFRA process facilitated zoning that helps to avoid inappropriate development being permitted in areas of high flood risk.

## 1.3 Flood Risk and its Relevance as an Issue to the Plan

### 1.3.1 Flood Risk

Flooding is an environmental phenomenon and can pose a risk to human health as well as causing economic and social effects. Some of the effects of flooding are identified on Table 1.

Certain lands within the Plan area have the potential to be vulnerable to flooding and this vulnerability could be exacerbated by changes in both the occurrence of severe rainfall events and associated flooding. Local conditions such as low-lying lands and slow surface water drainage can increase the risk of flooding.

**Table 1 Potential effects that may occur as a result of flooding**

<b>Tangible Effects</b>	<b>Intangible Human and Other Effects</b>
Damage to buildings (houses)	Loss of life
Damage to contents of buildings	Physical injury
Damage to new infrastructure e.g. roads	Increased stress
Loss of income	Physical and psychological trauma
Disruption of flow of employees to work causing knock on effects	Increase in flood related suicide
Enhanced rate of property deterioration and decay	Increase in ill health
Long term rot and damp	Homelessness
	Loss of uninsured possessions

## 1.4 Flood Risk Management Policy

### 1.4.1 EU Floods Directive

The European Directive 2007/60/EC on the assessment and management of flood risk aims to reduce and manage the risks that floods pose to human health, the environment, cultural heritage and economic activity. The Directive applies to inland waters as well as all coastal waters across the whole territory of the EU. The Directive requires Member States to:

- Carry out a preliminary assessment by 2011 in order to identify the river basins and associated coastal areas where potential significant flood risk exists (preliminary mapping was prepared and a list of Areas for Further Assessment finalised in 2012).
- Prepare flood extent maps for the identified areas (finalised in 2016 for inclusion in Flood Risk Management Plans – see below).
- Prepare flood risk management plans focused on prevention, protection and preparedness. These plans are to include measures to reduce the probability of flooding and its potential consequences. These Plans were adopted in 2018.

Implementation of the EU Floods Directive is required to be coordinated with the requirements of the EU Water Framework Directive and the current National River Basin Management Plan.

### 1.4.2 National Flood Policy

Historically, flood risk management focused on land drainage for the benefit of agricultural improvement. With increasing urbanisation, the Arterial Drainage Act, 1945, was amended in 1995 to permit the Office of Public Works (OPW) to implement localised flood relief schemes to provide flood protection for cities, towns and villages.

In line with changing national and international paradigms on how to manage flood risk most effectively and efficiently, a review of national flood policy was undertaken in 2003-2004. The review was undertaken by an Inter-Departmental Review Group, led by the Minister of State at the Department of Finance with special responsibility for the OPW. The Review Group prepared a report that was put to Government, and subsequently approved and published in September 2004 (Report of the Flood Policy Review Group, OPW, 2004).

The scope of the review included a review of the roles and responsibilities of the different bodies with responsibilities for managing flood risk, and to set a new policy for flood risk management in Ireland into the future. The adopted policy was accompanied by many specific recommendations, including:

- Focus on managing flood risk, rather than relying only flood protection measures aimed at reducing flooding;
- Taking a catchment-based approach to assess and manage risks within the whole-catchment context; and

- Being proactive in assessing and managing flood risks, including the preparation of flood maps and flood risk management plans.

### **1.4.3 National CFRAM Programme**

The national Catchment Flood Risk Assessment and Management (CFRAM) programme commenced in Ireland in 2011. 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. The Programme has been implemented through CFRAM studies that have been undertaken for each of the river basin districts in Ireland.

The CFRAM Programme comprises three phases as follows:

- The Preliminary Flood Risk Assessment<sup>1</sup> (PFRA) mapping exercise, which was completed in 2012;
- The CFRAM Studies and parallel activities, with Flood Risk Management Plans finalised in 2018; and
- Implementation and Review.

The Programme provides for three main consultative stages as follows:

- Consultation for the PFRA mapping that was adopted in 2012;
- Consultation for Flood Extent mapping, that was finalised in 2016 for inclusion in Flood Risk Management Plans; and
- Consultation for Flood Risk Management Plans, that were adopted in 2018.

The OPW is the lead agency for flood risk management in Ireland. The coordination and implementation of Government policy on the management of flood risk in Ireland is part of its responsibility. The European Communities (Assessment and Management of Flood Risks) Regulations 2010 (S.I. No. 122) identifies the Commissioners of Public Works as the 'competent authority' with overall responsibility for implementation of the Floods Directive 2007/60/EC. The OPW is the principal agency involved in the preparation of CFRAM Studies.

### **1.4.4 Flood Risk Management Guidelines**

#### **1.4.4.1 Introduction**

In 2009, the OPW and the then Department of the Environment and Local Government (DEHLG) published Guidelines on flood risk management for planning authorities entitled *The Planning System and Flood Risk Management - Guidelines for Planning Authorities*. The Guidelines introduce mechanisms for the incorporation of flood risk identification, assessment and management into the planning process. Implementation of the Guidelines is intended to be achieved through actions at the national, regional, local authority and site-specific levels. Planning authorities and An Bord Pleanála are required to have regard to the Guidelines in carrying out their functions under the Planning Acts.

The core objectives of the Guidelines are to:

- Avoid inappropriate development in areas at risk of flooding;
- Avoid new developments increasing flood risk elsewhere, including that which may arise from surface water run-off;
- Ensure effective management of residual risks for development permitted in floodplains;
- Avoid unnecessary restriction of national, regional or local economic and social growth;
- Improve the understanding of flood risk among relevant stakeholders; and
- Ensure that the requirements of EU and national law in relation to the natural environment and nature conservation are complied with at all stages of flood risk management.

---

<sup>1</sup> The PFRAs identified areas at risk of significant flooding and includes maps showing areas deemed to be at risk. The areas deemed to be most significant risk, where the flood risk that is of particular concern nationally, are identified as Areas for Further Assessment (AFAs). Nenagh was identified as an AFA. The OPW has undertaken a detailed assessment on the extent and degree of fluvial flood risk for various areas in County Tipperary, including these AFAs, producing Flood Extent Mapping.

#### 1.4.4.2 Principles of Flood Risk Management

The key principles of flood risk management set out in the flood Guidelines are to:

- Avoid development that will be at risk of flooding or that will increase the flooding risk elsewhere, where possible;
- Substitute less vulnerable uses, where avoidance is not possible; and
- Mitigate and manage the risk, where avoidance and substitution are not possible.

The Guidelines follow the principle that development should not be permitted in flood risk areas, particularly floodplains, except where there are no alternative and appropriate sites available in lower risk areas that are consistent with the objectives of proper planning and sustainable development.

Development in areas that have the highest flood risk should be avoided and/or only considered in exceptional circumstances (through a prescribed *Justification Test*) if adequate land or sites are not available in areas that have lower flood risk. Most types of development would be considered inappropriate in areas that have the highest flood risk. Only water-compatible development such as docks and marinas, dockside activities that require a waterside location, amenity open space, outdoor sports and recreation and essential transport infrastructure that cannot be located elsewhere would be considered appropriate in these areas.

#### 1.4.4.3 Stages of SFRA

The Flood Risk Management Guidelines recommend a staged approach to flood risk assessment that covers both the likelihood of flooding and the potential consequences. The stages of appraisal and assessment are:

**Stage 1 Flood risk identification** – to identify whether there may be any flooding or surface water management issues related to either the area of Regional Spatial and Economic Strategies, Development Plans and LAP's or a proposed development site that may warrant further investigation at the appropriate lower level plan or planning application levels.

**Stage 2 Initial flood risk assessment** – to confirm sources of flooding that may affect a Plan area or proposed development site, to appraise the adequacy of existing information and to scope the extent of the risk of flooding which may involve preparing flood zone maps. Where hydraulic models exist the potential impact of a development on flooding elsewhere and of the scope of possible mitigation measures can be assessed. In addition, the requirements of the detailed assessment are scoped.

**Stage 3 Detailed flood risk assessment** – to assess flood risk issues in sufficient detail and to provide a quantitative appraisal of potential flood risk to a proposed or existing development or land to be zoned, of its potential impact on flood risk elsewhere and of the effectiveness of any proposed mitigation measures.

#### 1.4.4.4 Flood Zones

Flood risk is an expression of the combination of the flood probability or likelihood and the magnitude of the potential consequences of the flood event. It is normally expressed in terms of the following relationship:

$$\text{Flood risk} = \text{Likelihood of flooding} \times \text{Consequences of flooding}$$

Likelihood of flooding is normally defined as the percentage probability of a flood of a given magnitude or severity occurring or being exceeded in any given year. For example, a 1% Annual Exceedance Probability (AEP) indicates the severity of a flood that is expected to be exceeded on average once in 100 years, i.e. it has a 1 in 100 (1%) chance of occurring in any one year.

Consequences of flooding depend on the hazards associated with the flooding (e.g. depth of water, speed of flow, rate of onset, duration, wave-action effects, water quality) and the vulnerability of people, property and the environment potentially affected by a flood (e.g. the age profile of the population, the type of development and the presence and reliability of mitigation measures).

Flood zones are geographical areas within which the likelihood of flooding is in a particular range and they are a key tool in flood risk management within the planning process as well as in flood warning and emergency planning.

There are three types of flood zones defined for the purposes of the Flood Guidelines:

- **Flood Zone A** – where the probability of flooding from rivers and the sea is highest (greater than 1% or 1 in 100 for river flooding or 0.5% or 1 in 200 for coastal flooding<sup>2</sup>);
- **Flood Zone B** – where the probability of flooding from rivers and the sea is moderate (between 0.1% or 1 in 1000 and 1% or 1 in 100 for river flooding and between 0.1% or 1 in 1000 year and 0.5% or 1 in 200 for coastal flooding); and
- **Flood Zone C** – where the probability of flooding from rivers and the sea is low (less than 0.1% or 1 in 1000 for both river and coastal flooding). Flood Zone C covers all other areas that are not in zones A or B.

A summary of the requirements of the Flood Guidelines for land uses across each of the above flood zones is provided at Appendix I.

## 1.5 Emerging Information and Disclaimer

It is important to note that compliance with the requirements of the Flood Risk Management Guidelines is currently based on emerging and best available data at the time of preparing the assessment, including Flood Risk Management Plans, which will be updated on a cyclical basis as part of CFRAM activities. The SFRA process has taken into account submissions made during the Plan- preparation process.

Following adoption of the Plan, information in relation to flood risk may be altered in light of future data and analysis, by, for example, the OPW, or future flood events. As a result, all landowners and developers are advised that Tipperary County Council and their agents can accept no responsibility for losses or damages arising due to assessments of the vulnerability to flooding of lands, uses and developments. Owners, users and developers are advised to take all reasonable measures to assess the vulnerability to flooding of lands and buildings (including basements) in which they have an interest prior to making planning or development decisions.

Any future SFRA for the Plan area or for the County will integrate other new and emerging data.

---

<sup>2</sup> Coastal flooding is not relevant to County Tipperary

## Section 2 Stage 1 SFRA - Flood Risk Identification

### 2.1 Introduction

Stage 1 SFRA (flood risk identification) has already been undertaken in order to identify whether there may be any flooding or surface water management issues within or adjacent to zoned lands and consequently whether Stage 2 SFRA (flood risk assessment) should be proceeded to. It is reproduced in part this document.

Nenagh is located within the Shannon Upper and Lower Catchment for which the Flood Risk Management Plan for the Shannon Upper & Lower River Basin (Unit of Management 25-26) has been prepared. Stage 1 SFRA is based on existing information on flood risk indicators based on historical evidence and computational models. A selection of key indicators is mapped for Nenagh in Appendix II.

### 2.2 Drainage, Defences and Early Warning Systems

With regard to areas benefitting from drainage and defences (flood relief scheme works), there are various measures that have been implemented in County Tipperary that will contribute towards flood risk management. These include the culverting of various streams and rivers in many urban areas and embankments; various stretches water bodies in the Plan area are culverted.

Arterial Drainage Schemes were carried out by the Office of Public Works under the Arterial Drainage Act 1945 to improve land for agricultural purposes and to mitigate flooding. Arterial drainage maintenance and monitoring of these schemes is still carried out by OPW on rivers, lakes, weirs, bridges and embankments to maintain adequate conveyance and ensure that flood waters (of varying magnitude but typically the 3-year flood) are retained in bank by lowering water levels during the growing season thus reducing waterlogging on the adjacent land during wetter periods. Various channels within the Nenagh LAP area benefit from the Arterial Drainage Schemes.

An embankment provides a 0.1% Annual Exceedance Probability standard of protection to an area at Lisboney Industrial Estate (the Defended Area is mapped at Appendix II). Residual risks remain in this area as, for example, the failure of the embankment could occur and/or a severe flood event that exceeds a flood design standard could overtop the embankment. Policy 8.5 of the Plan requires that any planning application within Defended Areas shall demonstrate that residual risks have been considered and include measures for their management as appropriate. Furthermore, the Council will contribute towards the protection of the embankment from interference or removal (Objective 8D).

The 2018 Flood Risk Management Plan (FRMP) for the Shannon Upper & Lower Basin (Unit of Management 25-26) identifies various general measures applicable to the catchment under "Measures Applicable for all Areas"<sup>3</sup>. The Plan identifies the following proposed measures for the catchment: Improve Long-Range Forecasting on the River Shannon to Optimise Operation of Water Level

---

<sup>3</sup> Under the headings of:

- Prevention: Sustainable Planning and Development Management
- Prevention: Sustainable Urban Drainage Systems
- Prevention: Voluntary Home Relocation
- Prevention: Local Adaptation Planning
- Prevention: Land Use Management and Natural Flood Risk Management Measures
- Protection: Minor Works Scheme
- Protection: Maintenance of Arterial Drainage Schemes and Existing Flood Relief Schemes
- Protection: Maintenance of Drainage Districts
- Protection: Maintenance of Channels Not Part of a Scheme
- Preparedness: Flood Forecasting and Warning
- Preparedness: Review of Emergency Response Planning
- Preparedness: Individual and Community Resilience
- Preparedness: Individual Property Protection
- Preparedness: Flood-Related Data Collection

Management Infrastructure; and Coordination of water level management on the River Shannon. The Plan identifies the following proposed measures for the Nenagh Area for Further Assessment (AFA):

**Proposed Measure:**

Progress the development of a Flood Relief Scheme for Nenagh AFA

**Outline:**

Progress the project-level development and assessment of a Flood Relief Scheme for Nenagh, including environmental assessment as necessary and further public consultation, for refinement and preparation for planning / exhibition and, if and as appropriate, implementation. The proposed measure for Nenagh that may be implemented after project-level assessment and planning or Exhibition and confirmation might include;

- Construct a new 480m embankment along Nenagh River to defend properties.
- Replace culvert on Benedin Stream with hydraulic control to limit flows downstream during flood events.
- Flood forecasting unit on River Nenagh.
- Targeted public awareness.
- Introduction of a storage area.

The provision of flood protection measures can significantly reduce flood risk. However, the Ministerial Guidelines require that the presence of flood protection structures should be ignored in determining flood zones. This is because of risks relating to failure and severe flood events that exceed design capacity (the risk of severe events is exacerbated with climate change). Notwithstanding this, new development can proceed in areas that are at elevated levels of flood risk subject to the Justification Test provided for by the Guidelines being passed, which takes into account proposals to manage flood risk, such as the development of defences. Although insurance can be challenging to attain in these instances.

As provided for under Tipperary County Development Plan 2022-2028 measure 11-11(b), it is the Council's policy to "Consult with the OPW in relation to proposed developments in the vicinity of Flood Relief Schemes and drainage channels and rivers for which the OPW are responsible, and to retain a strip on either side of such channels, where required, to facilitate maintenance access thereto". Such retention will, in combination with the direction of development within the existing footprints of settlements, safeguard flood plains from development throughout the County.

New developments should ensure that access is preserved for the maintenance of Arterial Drainage Districts and the OPW will be consulted with in the consideration of applications for developments in the vicinity of the Drainage District in this regard. Applications for development on land identified as benefiting land may be prone to flooding, and as such site-specific flood risk assessments may be required in these areas.

Met Éireann currently issues flood warnings for County Tipperary. Met Éireann, in collaboration with the OPW, is implementing a National Flood Forecasting and Warnings Service to forecast for fluvial and coastal flood events.

## 2.3 Other Flood Studies

Other Flood Studies considered include:

- SFRA for the Tipperary County Development Plan 2022-2028;
- Flood Risk Management Plan (Shannon Upper & Lower), 2018; and
- Regional Flood Risk Appraisal for the Southern Regional Spatial and Economic Strategy, 2019.

## 2.4 Flood Risk Indicators

Indicators of flood risk that are based on historical flooding events are identified and described on Table 2. Indicators of flood risk that are based on computational models – predictive flood risk



indicators – are identified and described on Table 3. A selection of the historical and predictive flood risk indicators that were considered by the SFRA are mapped at settlement level for Nenagh in Appendix II.

**Table 2 Historical Flood Risk Indicators**

Information Source	Description	Strategic Limitations
<b>Recorded Flood Events from the OPW</b>	A flood event is the occurrence of recorded flooding at a given location on a given date. The flood event is derived from different types of information (reports, photographs etc.).	This dataset only provides a spot location
<b>Recurring Flood Events</b>	A flood event that has occurred more than once at a certain area is named a recurring flood event.	This dataset only provides a spot location
<b>OPW Flood Extent</b>	A flood extent is an inundated area as recorded at a certain moment in time. This layer of information includes floods recorded in 1999/2000 and 1954.	Coverage limited
<b>Alluvium Soils</b>	Mineral alluvial soil mapping is indicative of recurrent or significant fluvial flooding at some point in the past and was generated by Teagasc with co-operation of the Forest Service, EPA and GSI. This project was completed May 2006.	Drainage may have changed significantly since these soils were deposited.
<b>Benefitting lands (OPW) from Arterial Drainage Schemes</b>	Benefitting lands mapping is a dataset identifying land that might benefit from the implementation of Arterial (Major) Drainage Schemes (under the Arterial Drainage Act 1945) and indicating areas of land estimated or reported to be subject to flooding or poor drainage. Arterial Drainage Schemes are schemes the OPW has a statutory duty to maintain. Arterial Drainage Schemes were carried out under the Arterial Drainage Act, 1945 to improve land for agriculture and to mitigate flooding. Rivers, lakes weirs and bridges were modified to enhance conveyance, embankments were built to control the movement of flood water and various other work was carried out under Part II of the Arterial Drainage Act, 1945. The purpose of the schemes was to improve land for agriculture, to ensure that the 3 – year flood was retained in bank this was achieved by lowering water levels during the growing season to reduce waterlogging on the land beside watercourses known as callows. Flood protection in the benefiting lands was increased as a result of the Arterial Drainage Schemes.	Identifies broad areas - low resolution for flood risk management

**Table 3 Predictive Flood Risk Indicators**

Information Source	Description	Strategic Limitations
<b>CFRAM Study, Flood Extent Mapping, 2016</b>	Following the undertaking of the PFRA, the OPW, through its engineering consultants and working with local authorities and other stakeholders, conducted extensive engineering assessments to better understand and detail the actual risk from flooding for areas that were at highest levels of risk. This was the subject of public consultation. The outcome of that work includes Predicted Flood Extent maps that were finalised in 2016. For fluvial flood levels, calibration and verification of the models make use of the best available data including hydrometric records, photographs, videos, press articles and anecdotal information.	Spatial spread is limited, including to the areas that are considered to be at most risk of flooding.
<b>National Indicative Fluvial Mapping (NIFM) 2020</b>	The PFRA indicative flood maps have now been superseded by the recently published NIFM.  The OPW NIFM project has produced second generation indicative fluvial flood spatial data that are of a higher quality and accuracy to those produced for the first cycle PFRA. This project has covered 27,000 km of river reaches, separated into 37 drainage areas, consisting of 509 sub-catchments.	Does not cover smaller sized catchments.

Information Source	Description	Strategic Limitations
<b>GSI Predictive groundwater flood map</b>	<p>The predictive groundwater flood map presents the probabilistic flood extents for locations of recurrent karst groundwater flooding. It consists of a series of stacked polygons at each site representing the flood extent for specific AEP's mapping floods that are expected to occur every 10, 100 and 1000 years (AEP of 0.1, 0.01, and 0.001 respectively). The map is focussed primarily (but not entirely) on flooding at seasonally inundated wetlands known as turloughs. Sites were chosen for inclusion in the predictive map based on existing turlough databases as well as manual interpretation of SAR imagery. The mapping process tied together the observed and SAR-derived hydrograph data, hydrological modelling, stochastic weather generation and extreme value analysis to generate predictive groundwater flood maps for over 400 qualifying sites.</p>	<p>Not all turloughs are included in the predictive map as some sites could not be successfully monitored with SAR and/or modelled.</p>
<b>OPW Preliminary Risk Assessment (PFRA) Fluvial, Groundwater and Pluvial flood maps, 2012</b>	<p>The OPW PFRA mapping dataset has been arrived at by:</p> <ul style="list-style-type: none"> <li>• Reviewing records of floods that have happened in the past;</li> <li>• Undertaking analysis to determine which areas might flood in the future, and what the impacts might be; and</li> <li>• Extensive consultation with each local authorities and other Government departments and agencies.</li> </ul> <p>This assessment has considered all types of flooding, including that which can occur from rivers, the sea and estuaries, heavy rain, groundwater, the failure of infrastructure, and so on. It has also considered the impacts flooding can have on people, property, businesses, the environment and cultural assets. Further information on the purpose and development of the OPW PFRA Maps are available on <a href="http://www.floodinfo.ie">www.floodinfo.ie</a>.</p>	<p>The PFRA is only a preliminary assessment, based on available or readily derivable information. Analysis has been undertaken to identify areas prone to flooding, and the risks associated with such flooding, but this analysis is purely indicative and undertaken for the purpose of completing the PFRA. The mapping has been developed using simple and cost-effective methods and is based on broad-scale simple analysis and may not be accurate for a specific location/use.</p> <p>Pluvial flood risk is likely to be present in local areas, however; it is not taken into account in the delineation of flood zones. Furthermore, PFRA indicative pluvial maps (2012) are not considered to be reliable for the purposes of zoning or decision-making.</p>

## 2.5 Conclusion

The information detailed above indicates elevated levels of flood risk in various locations across the town; therefore, a Stage 2 SFRA was proceeded to.

## Section 3 Stage 2 SFRA - Flood Risk Assessment

### 3.1 Introduction

Stage 2 SFRA (flood risk assessment) has been undertaken in order to:

- Confirm the sources of flooding that may affect zoned and adjacent areas;
- Appraise the adequacy of existing information as identified by the Stage 1 SFRA; and
- Scope the extent of the risk of flooding through the preparation of flood zone maps.

### 3.2 Findings and Adequacy of Existing Information and Delineation of Flood Zones

Desk and in-field studies were undertaken taking into account the following factors:

- OPW's CFRAMS fluvial flood extent mapping (2016) and other predictive indicators;
- OPW's National Indicative Fluvial Mapping (2020);
- Historical indicators of flood risk;
- Documented Council knowledge of lands;
- The potential source and direction of flood paths from rivers and streams;
- Vegetation indicative of flood risk; and
- The locations of topographic/built features that coincide with the flood indicator related boundaries/topographical survey.

Within the annual exceedance probabilities specified by the Flood Guidelines for Flood Zones A and B, there are elevated levels of flood risk at certain areas in Nenagh, as shown in Appendix II.

### 3.3 Flood Risk Zone Mapping

Flood Risk Zone maps have been produced taking into account the findings of the Stage 1 and Stage 2 SFRA desk and in field studies as identified above<sup>4</sup>.

The Flood Risk Zone map for Nenagh is provided in Appendix II and identifies Flood Zone A (darker blue) and Flood Zone B<sup>5</sup> (lighter blue). All other areas fall within Flood Zone C. As per the Guidelines, the flood zones are as follows:

- Flood Zone A – where the probability of flooding from rivers is highest (greater than 1% or 1 in 100 for river flooding);
- Flood Zone B – where the probability of flooding from rivers is moderate (between 0.1% or 1 in 1000 and 1% or 1 in 100 for river flooding); and
- Flood Zone C – where the probability of flooding from rivers is low (less than 0.1% or 1 in 1000 for river flooding).

### 3.4 Sensitivity to Climate Change

'The Planning System and Flood Risk Management Guidelines for Planning Authorities and Technical Appendices, 2009' recommends that a precautionary approach to climate change is adopted due to the level of uncertainty involved in the potential effects. In this regard, the Guidelines recommends:

<sup>4</sup> Including taking into account predictive and historical indicators of flood risk, documented Council knowledge of lands, Council Engineer review and input into indicators and flood zones (local knowledge), the potential source and direction of flood paths from rivers and streams, vegetation indicative of flood risk and the locations of topographic/built features that coincide with the flood indicator related boundaries/topographical survey.

<sup>5</sup> As identified by the Guidelines, in rivers with a well-defined floodplain or where the coastal plain is well defined at its rear, the limits of Zones A and B will virtually coincide. Zone B will only be significantly different in spatial extent from Zone A where there is extensive land with a gentle gradient away from the river or the sea.

- Recognising that significant changes in the flood extent may result from an increase in rainfall or tide events and accordingly adopting a cautious approach to zoning land in these potential transitional areas;
- Ensuring that the levels of structures designed to protect against flooding such as flood defences<sup>6</sup>, land raising or raised floor levels are sufficient to cope with the effects of climate change over the lifetime of the development they are designed to protect (normally 85-100 years); and
- Ensuring that structures to protect against flooding and the development protected are capable of adaptation to the effects of climate change when there is more certainty about the effects and still time for such adaptation to be effective.

The CFRAM Programme include maps for two potential future scenarios taking account of different degrees of climate impact, the Mid-Range Future Scenario (more likely to occur over the coming decades) and the High-Range Future Scenario (less likely to occur over the coming decades). A selection of Future Scenario Mapping is provided under Appendix II of this SFRA report. In compliance with the Guidelines, the Flood Zones identified by the SFRA are defined on the basis of current flood risk. The CFRAMS potential future scenarios mapping and the potential impacts of climate change, including increased rainfall intensities and increased fluvial flood flows, are required to be further taken into account at lower tiers of decision making concerning individual projects.

Flood Risk Assessments shall apply the precautionary approach recommended in the Guidelines and shall be informed by the advice on the expected impacts of climate change and the allowances to be provided for future flood risk management provided in the OPW's (2019) Flood Risk Management Climate Change Sectoral Adaptation Plan and the guidance on potential future scenarios contained therein.

### **3.5 Sustainable Drainage Systems and Surface Water Guidance and Strategy**

As provided for by measures integrated into both the existing, already in force, Tipperary County Development Plan (including the 'Nature Based Solutions' to SUDS as further detailed in Chapter 11 of the County Development Plan) and the Local Area Plan (including the measures reproduced at Section 4 of this report), new developments will be required to incorporate the requirement for Sustainable Urban Drainage Systems (SuDS) where appropriate. In combination, these provisions contribute towards a sustainable drainage strategy for the Plan area.

It is likely that some or all of the following SuDS techniques will be applicable to key development sites within Nenagh, such as the regeneration sites, including to manage surface water run-off:

- Rainwater harvesting
- Green roofs
- Infiltration systems
- Proprietary treatment systems
- Filter strips
- Filter drains
- Swales
- Bioretention systems
- Trees
- Pervious pavements
- Attenuation storage tanks
- Detention basins
- Ponds and wetlands

Each land use zoning objective allows for a range of possible uses and the Local Area Plan, and associated County Development Plan, allow for a range of scales, heights, densities

---

<sup>6</sup> Defended areas are highly sensitive to climate change as the likelihood of defence failure and resulting flooding increases.

configurations/layouts and designs. The application of different SuDS techniques will be dependent on a combination of the site's characteristics and the development (when known) being considered.

Because of the infinite range of land use types and associated developments and designs that could occur on sites within the Plan area under this type of Plan<sup>7</sup>, the guidance from this SFRA is to consider the full range of SUDs available, taking into account the recommendations and information provided above and below. On key development sites, in particular, such as the regeneration sites, integrated and area-based provision of SuDS and green infrastructure may be appropriate in order to avoid reliance on individual site by site solutions.

Some sites, such as those for which guidance is provided for below, will pose particular challenges for SuDS. The best practice manuals cited at the end of this sub-section should be considered in determining solutions at these and other development sites.

At sites with high groundwater levels:

- Infiltration techniques may be particularly challenging and shallow infiltration basins or permeable pavements, may be most appropriate.
- Storage and conveyance systems need to be kept above maximum groundwater levels and membranes of appropriate robustness should be used to line any tanks.
- Locating storage tanks or lined sub-base systems below the maximum likely groundwater level can cause result in flotation and structural risks.

At sites that are steeply sloping:

- Effective utilisation of SuDS storage capacity should be considered, which can benefit from aligning with contours of roads and other structures, where these sites are terraced. Terraced car-parking areas can allow for storage of water through pervious pavements. Basins on terraces can provide open space. The runoff catchment on these sites can also be divided into smaller sub catchments.
- Velocities in swales and basins due to the steep slope can be managed by using check dams in swales or in storage layers, such as below permeable pavements.
- The possibility of infiltrating water resurfacing downslope or to increase pressure on downslope structures, such as walls, causing them to fail should be considered.

At sites that are very flat:

- On very flat sites, it is often not possible to construct piped drainage systems with sufficient falls to achieve minimum self-cleansing velocities. The solution can involve the use of shallow SuDS components such as swales, pervious pavements or high-capacity linear drainage channels, often dividing the site into small sub-catchments and providing local combined storage and conveyance components.
- A slight fall on any subgrade exposed to water is preferred in order to avoid ponding of water and reduction in strength in the soil due to waterlogging. If this is not possible then reduction in strength should be taken into account in the structural design of tanks or pervious pavements.
- Pumping should be a last resort and only allowable in situations where guaranteed maintenance of the pumps can be ensured.

At sites that include areas of floodplain:

- Notwithstanding that all storage volume should normally be provided within the development footprint, outside of the floodplain, SuDS on floodplains can be effective in managing routine rainfall/treatment for frequent events.
- SuDS should be selected and designed taking account of the likely high groundwater table and vulnerability to erosion during periods of high flows/water levels and SuDS should not reduce floodplain storage or conveyance.
- Conveyance routes should limit grading and the creation of surface features that could either reduce floodplain capacity or be washed out in a flood.

---

<sup>7</sup> Refer to Plan "Table 9.2: Zoning Matrix", for example, for the wide range of land uses possible at sites zoned with single land use zoning objectives.

- Surface discharge from SuDS should be dispersed with point discharges minimised or eliminated.
- All SuDS within or crossing a floodplain should take full consideration of the likely influence of river water levels on the design performance. Combined probability assessments may be required.
- Siltation and subsequent clearance after a flood event has subsided should also be taken into account in the design.

SuDS are effective technologies, which aim to reduce flood risk, improve water quality and enhance biodiversity and amenity.

The systems should aim to mimic the natural drainage of the application site to minimise the effect of a development on flooding and pollution of existing waterways. SuDS include devices such as swales, permeable pavements, filter drains, storage ponds, constructed wetlands, soakways and green roofs. The integration of nature-based solutions, such as amenity areas, ecological corridors and attenuation ponds, into public and private development initiatives, is applicable within the provisions of the Plan and should be encouraged. Applications for development should take into account, as appropriate, the Department of Housing, Local Government and Heritage's (2022) "Nature-based Solutions to the Management of Rainwater and Surface Water Runoff in Urban Areas - Water Sensitive Urban Design - Best Practice Interim Guidance Document".

In some exceptional cases, and at the discretion of the Council, where it is demonstrated that SuDS devices are not feasible, approval may be given to install underground attenuation tanks or enlarged pipes in conjunction with other devices to achieve the required water quality. Such alternative measures will only be considered as a last resort. Proposals for surface water attenuation systems should include maintenance proposals and procedures.

Urban developments, both within developments and within the public realm, should seek to minimise and limit the extent of hard surfacing and paving and require the use of sustainable drainage techniques for new development or for extensions to existing developments, in order to reduce the potential impact of existing and predicted flood risk. Development proposals should be accompanied by a comprehensive SuDS assessment that addresses run-off rate, run-off quality and its impact on the existing habitat and water quality.

For larger sites (i.e. multiple dwellings or commercial units) master planning should ensure that existing flow routes are maintained, through the use of green infrastructure. In addition, where multiple individual proposals are being made SuDS should be integrated where appropriate and relevant.

All proposed development, should consider the impact of surface water flood risks on drainage design e.g. in the form of a section within the flood risk assessment (for sites in Flood Zone A or B) or part of a surface water management plan.

Pluvial flood risk is likely to be present in local areas, however; it is not taken into account in the delineation of flood zones. Furthermore, PFRA indicative pluvial maps (2012) are not considered to be reliable for the purposes of zoning or decision-making. Particular attention should be given to development in low-lying areas which may act as natural ponds for collection of run-off. The drainage design should ensure no increase in flood risk to the site, or the downstream catchment. Where possible, and particularly in areas of new development, floor levels should be at an appropriate height above adjacent roads and hard standing areas to reduce the consequences of any localised flooding. Where this is not possible, an alternative design appropriate to the location may be prepared.

Further to the above, proposals for development should consider the Construction Industry Research and Information Association (CIRIA) SuDS Manual 2015 and any future update of this guidance and Greater Dublin Strategic Drainage Study documents in designing SuDS solutions, including the New Development Policy, the Final Strategy Report, the Code of Practice and "Irish SuDS: guidance on applying the GSDS surface water drainage criteria".

## **Section 4 Flood and Drainage Provisions**

### **4.1 Introduction**

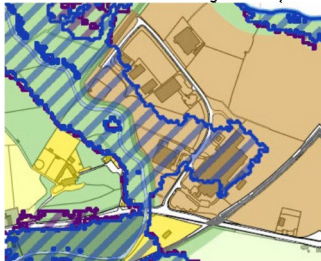
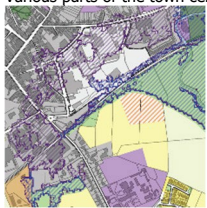
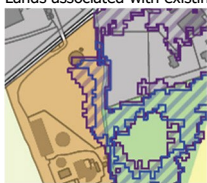
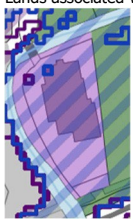
In order to comply with *The Planning System and Flood Risk Management - Guidelines for Planning Authorities* (Department of the Environment, Heritage and Local Government and Office of Public Works, 2009) and Department of the Environment, Community and Local Government Circular (*PL 2/2014*) and contribute towards flood risk management within the Plan area, the measures below have been integrated into the Nenagh Local Area Plan and the existing, already in force, Tipperary County Development Plan 2022-2028.

### **4.2 Land Use Zoning**

The Flood Zones identified by the SFRA were used in line with the requirements provided for by the Flood Guidelines for land uses in Flood Zones A and B. Flood Zones were a key informant the land use zoning provided for by the Plan.

In order to meet the objectives of proper planning and sustainable development various uses are provided for in Flood Zones A and B. These uses have been subject to Justification Tests, as required by the Flood Guidelines, informed by the Council, which examine such proposals against various criteria - as detailed on Table 4.

**Table 4 Justification Tests**


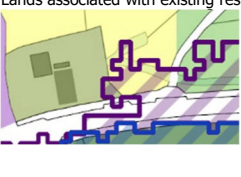
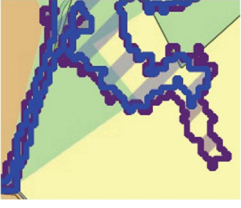
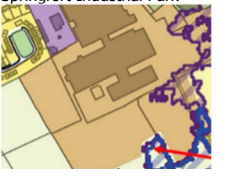
Site	Zoning in Plan  Note that the meaning of zoning objectives has been influenced by the SFRA process and these meanings are explained in the Plan, including through the provisions repeated in this SFRA report.	Flood Zone	Justification Test (Fails, if one of the following fails; all must be passed for the test to be passed)			Overall Result
			Is the settlement targeted for growth under the NPF, RSES or CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement and in particular has the required sub-criteria been satisfied <sup>8</sup> ?	Has flood risk assessment to an appropriate level of detail been carried out as part of the SEA as part of the plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impact elsewhere?	
 <p>Lands associated with existing Lisbunny Industrial Estate</p>	Employment	A and B	Yes – Nenagh is designated as a 'Key Town'. As set out in the Core Strategy of the Tipperary CDP 2022	Lisbunny Industrial Estate is a critical employment site for Nenagh. The site is located just within a short walk time distance of the town centre, and plans for a segregated cycleway to the estate and the town centre will soon be implemented. The lands have proximate access to water, water run-off to the nearby rivers (subject to environmental assessment), gas, power (critical sub-station infrastructure is located nearby) and broadband – all infrastructure attractive to industry. As such, the lands represent the best serviced land within Nenagh, to support employment and the sustainable growth of the town.	These lands are largely developed. Policy 8.5 of the Plan would significantly limit the further development on these lands. Furthermore, much of these lands are protected by flood defences that provide for a 0.1% Annual Exceedance Probability Standard of Protection <sup>9</sup> . Defended areas are mapped in Appendix II of this SFRA.	Pass
 <p>Various parts of the town centre; mixed uses</p>	Urban Core and Regeneration	A and B	Yes – Nenagh is designated as a 'Key Town'. As set out in the Core Strategy of the Tipperary CDP 2022	This land use zoning proposal fulfils all required sub criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the - as confirmed by the Planning Department.	A Stage 1 and 2 Flood Risk Assessment has been undertaken as part of the plan preparation process. This level of assessment is considered appropriate and has informed the zoning proposals and policies and objectives contained in the LAP. Section 4 of the SFRA outlines the measures integrated into LAP to adequately manage flood risks. A precautionary approach has been applied to the zoning of lands with undeveloped lands that is liable to flood generally zoned for amenity or town environs use, flood risk maps have been overlain on the land use zoning map to clearly indicate lands constrained by flood risk. The Lap is subject to the policies, objectives and requirements of the TCDP that relate to flood risk and climate change and the LAP contains a number of specific policies and objectives in this regard.	Pass
 <p>Lands associated with existing wastewater treatment plant</p>	Employment	A and B	Yes – Nenagh is designated as a 'Key Town'. As set out in the Core Strategy of the Tipperary CDP 2022	This land use zoning proposal fulfils all required sub criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the - as confirmed by the Planning Department.	A Stage 1 and 2 Flood Risk Assessment has been undertaken as part of the plan preparation process. This level of assessment is considered appropriate and has informed the zoning proposals and policies and objectives contained in the LAP. Section 4 of the SFRA outlines the measures integrated into LAP to adequately manage flood risks. A precautionary approach has been applied to the zoning of lands with undeveloped lands that is liable to flood generally zoned for amenity or town environs use, flood risk maps have been overlain on the land use zoning map to clearly indicate lands constrained by flood risk. The Lap is subject to the policies, objectives and requirements of the TCDP that relate to flood risk and climate change and the LAP contains a number of specific policies and objectives in this regard.	Pass
 <p>Lands associated with existing Nenagh Leisure Centre</p>	Community and Services Infrastructure	A and B	Yes – Nenagh is designated as a 'Key Town'. As set out in the Core Strategy of the Tipperary CDP 2022	This land use zoning proposal fulfils all required sub criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the - as confirmed by the Planning Department.	A Stage 1 and 2 Flood Risk Assessment has been undertaken as part of the plan preparation process. This level of assessment is considered appropriate and has informed the zoning proposals and policies and objectives contained in the LAP. Section 4 of the SFRA outlines the measures integrated into LAP to adequately manage flood risks. A precautionary approach has been applied to the zoning of lands with undeveloped lands that is liable to flood generally zoned for amenity or town environs use, flood risk maps have been overlain on the land use zoning map to clearly indicate lands constrained by flood risk. The Lap is subject to the policies, objectives and requirements of the TCDP that relate to flood risk and climate change and the LAP contains a number of specific policies and objectives in this regard.	Pass

<sup>8</sup> (i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement; (ii) Comprises significant previously developed and/or under-utilised lands; (iii) Is within or adjoining the core of an established or designated urban settlement; (iv) Will be essential in achieving compact and sustainable urban growth; and (v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.

<sup>9</sup> An embankment provides a 0.1% Annual Exceedance Probability standard of protection to an area at Lisbony Industrial Estate (the Defended Area is mapped at Appendix II). Residual risks remain in this area as, for example, the failure of the embankment could occur and/or a severe flood event that exceeds a flood design standard could overtop the embankment. Policy 8.5 of the Plan requires that any planning application within Defended Areas shall demonstrate that residual risks have been considered and include measures for their management as appropriate. Furthermore, the Council will contribute towards the protection of the embankment from interference or removal (Objective 8D).


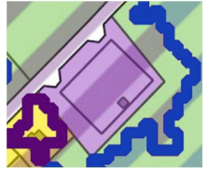

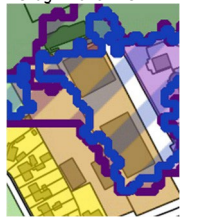


Strategic Flood Risk Assessment for the Nenagh and Environs Local Area Plan 2024-2030

Site	Zoning in Plan  Note that the meaning of zoning objectives has been influenced by the SFRA process and these meanings are explained in the Plan, including through the provisions repeated in this SFRA report.	Flood Zone	Justification Test (Fails, if one of the following fails; all must be passed for the test to be passed)			Overall Result
			Is the settlement targeted for growth under the NPF, RSEs or CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement and in particular has the required sub-criteria been satisfied <sup>10</sup> ?	Has flood risk assessment to an appropriate level of detail been carried out as part of the SEA as part of the plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impact elsewhere?	
Lands associated with existing St. Joseph's CBS 	Community and Services Infrastructure	B	Yes – Nenagh is designated as a 'Key Town'. As set out in the Core Strategy of the Tipperary CDP 2022	This land use zoning proposal fulfils all required sub criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the - as confirmed by the Planning Department.	A Stage 1 and 2 Flood Risk Assessment has been undertaken as part of the plan preparation process. This level of assessment is considered appropriate and has informed the zoning proposals and policies and objectives contained in the LAP. Section 4 of the SFRA outlines the measures integrated into LAP to adequately manage flood risks. A precautionary approach has been applied to the zoning of lands with undeveloped lands that is liable to flood generally zoned for amenity or town environs use, flood risk maps have been overlain on the land use zoning map to clearly indicate lands constrained by flood risk. The Lap is subject to the policies, objectives and requirements of the TCDP that relate to flood risk and climate change and the LAP contains a number of specific policies and objectives in this regard.	Pass
Lands associated with existing residential development 	New Residential	B	Yes – Nenagh is designated as a 'Key Town'. As set out in the Core Strategy of the Tipperary CDP 2022	This land use zoning proposal fulfils all required sub criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the - as confirmed by the Planning Department.	A Stage 1 and 2 Flood Risk Assessment has been undertaken as part of the plan preparation process. This level of assessment is considered appropriate and has informed the zoning proposals and policies and objectives contained in the LAP. Section 4 of the SFRA outlines the measures integrated into LAP to adequately manage flood risks. A precautionary approach has been applied to the zoning of lands with undeveloped lands that is liable to flood generally zoned for amenity or town environs use, flood risk maps have been overlain on the land use zoning map to clearly indicate lands constrained by flood risk. The Lap is subject to the policies, objectives and requirements of the TCDP that relate to flood risk and climate change and the LAP contains a number of specific policies and objectives in this regard.	Pass
Lands zoned Residential 	New Residential	A and B	Yes – Nenagh is designated as a 'Key Town'. As set out in the Core Strategy of the Tipperary CDP 2022	No	Planning permission has recently been secured on these lands, utilising a Site-Specific Flood Risk Assessment at the Development Management stage. It is therefore considered by the Council appropriate that these lands remained zoned. Additional text included with regard to this site into Section 8.5 of the LAP	FAIL
Lands associated with existing commercial development - Springfort Industrial Park 	Employment	B	Yes – Nenagh is designated as a 'Key Town'. As set out in the Core Strategy of the Tipperary CDP 2022	No	These lands are largely developed. Policy 8.5 of the Plan would significantly limit the further development on these lands.	FAIL- however, see Plan Policy 8.5


<sup>10</sup> (i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement; (ii) Comprises significant previously developed and/or under-utilised lands; (iii) Is within or adjoining the core of an established or designated urban settlement; (iv) Will be essential in achieving compact and sustainable urban growth; and (v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.

Strategic Flood Risk Assessment for the Nenagh and Environs Local Area Plan 2024-2030

Site	Zoning in Plan  Note that the meaning of zoning objectives has been influenced by the SFRA process and these meanings are explained in the Plan, including through the provisions repeated in this SFRA report.	Flood Zone	Justification Test (Fails, if one of the following fails; all must be passed for the test to be passed)			Overall Result
			Is the settlement targeted for growth under the NPF, RSES or CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement and in particular has the required sub-criteria been satisfied <sup>11</sup> ?	Has flood risk assessment to an appropriate level of detail been carried out as part of the SEA as part of the plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impact elsewhere?	
Lands associated with existing Arrabawn Homevalue Nenagh 	Employment	A and B	Yes – Nenagh is designated as a 'Key Town'. As set out in the Core Strategy of the Tipperary CDP 2022	No	These lands are largely developed. Policy 8.5 of the Plan would significantly limit the further development on these lands.	<b>FAIL-</b> however, see Plan Policy 8.5
Lands associated with existing electricity transmission infrastructure 	Community Services and Infrastructure	A and B	Yes – Nenagh is designated as a 'Key Town'. As set out in the Core Strategy of the Tipperary CDP 2022	No	These lands are largely developed. Policy 8.5 of the Plan would significantly limit the further development on these lands.	<b>FAIL-</b> however, see Plan Policy 8.5
Lands associated with existing wastewater treatment plant 	Community Services and Infrastructure	A and B	Yes – Nenagh is designated as a 'Key Town'. As set out in the Core Strategy of the Tipperary CDP 2022	No	These lands are largely developed. Policy 8.5 of the Plan would significantly limit the further development on these lands.	<b>FAIL-</b> however, see Plan Policy 8.5
Lands associated with existing commercial development - Nenagh Plant Hire 	Employment	A and B	Yes – Nenagh is designated as a 'Key Town'. As set out in the Core Strategy of the Tipperary CDP 2022	No	These lands are largely developed. Policy 8.5 of the Plan would significantly limit the further development on these lands.	<b>FAIL-</b> however, see Plan Policy 8.5

<sup>11</sup> (i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement; (ii) Comprises significant previously developed and/or under-utilised lands; (iii) Is within or adjoining the core of an established or designated urban settlement; (iv) Will be essential in achieving compact and sustainable urban growth; and (v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.

Strategic Flood Risk Assessment for the Nenagh and Environs Local Area Plan 2024-2030

Site	Zoning in Plan  Note that the meaning of zoning objectives has been influenced by the SFRA process and these meanings are explained in the Plan, including through the provisions repeated in this SFRA report.	Flood Zone	Justification Test (Fails, if one of the following fails; all must be passed for the test to be passed)			Overall Result
			Is the settlement targeted for growth under the NPF, RSES or CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement and in particular has the required sub-criteria been satisfied <sup>12</sup> ?	Has flood risk assessment to an appropriate level of detail been carried out as part of the SEA as part of the plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impact elsewhere?	
<p>Lands associated with existing residential developments</p> 	New and Existing Residential	A and B	Yes – Nenagh is designated as a 'Key Town'. As set out in the Core Strategy of the Tipperary CDP 2022	No	These lands are largely developed. Policy 8.5 of the Plan would significantly limit the further development on these lands.	<b>FAIL- however, see Plan Policy 8.5</b>

<sup>12</sup> (i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement; (ii) Comprises significant previously developed and/or under-utilised lands; (iii) Is within or adjoining the core of an established or designated urban settlement; (iv) Will be essential in achieving compact and sustainable urban growth; and (v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.

### 4.3 Integration of other provisions relating to flood risk management into the existing, already in force, Tipperary County Development Plan

Other provisions relating to flood risk management, including the following, have also been integrated into the Tipperary County Development Plan 2022-2028:

**Table 5 County Development Plan Provisions relating to Flood Risk Management**

Provisions including:
<p><b>11.5.1 Flood Risk Data</b></p> <p>The most significant water bodies in Tipperary are the Rivers Shannon and Suir, forming the core of a network of water bodies. The control of flooding, in the face of climate change, is a key land-use management issue and collective responsibility for everyone. The EU Directive on the Assessment and Management of Flood Risks, often referred to as the 'Floods Directive' requires management of flood risk on a RBMP basis, and having consideration to national water retention measures. The Office of Public Works (OPW) manages relevant data, available on <a href="http://www.floodinfo.ie">www.floodinfo.ie</a>. including, and not limited to Past Flood Events, Predicative Flood Risk Maps, and Arterial Drainage Schemes etc.</p> <p>The Council is committed to supporting and implementing, in co-operation with the OPW, the requirements of the 'Flood Directive', the Flood Risk Regulations (2010) and the provisions of The Planning System and Flood Risk Management Guidelines (DEHLG and OPW, 2009) and Circular PL2/2014. This Plan has been subject to a SFRA (Volume 5), having consideration to available and relevant data.</p> <p><b>11.5.2 Assessing Flood Risk</b></p> <p>In accordance with the Planning System and Flood Risk Management Guidelines for Planning Authorities, (DEHLG 2009), the Council will adopt a precautionary approach to flood risk management, and will seek to avoid inappropriate development in all areas at risk of flooding<sup>13</sup>. In this respect, the Council will have regard to planning applications within Flood Risk Zones A and B as outlined in OPW predicative flood mapping. Applicants should, and may be requested to, consider a 'Staged Approach' to individual site assessment in line with Section 2.21 of the Guidelines in support of development. Where proposals for new development are located in flood Zones A and B, the applicant should consider a site outside of the flood zones, or may be required to submit a flood risk assessment to demonstrate that the development complies with the 'Justification Test' set out in the Guidelines. 'Constrained Land Use' approach was applied to land use zoning as set out within Volume 2 of this Plan.</p> <p>Flood risk assessments submitted 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. These structural and non-structural flood risk management measures are further addressed in Volume 3 Development Management standards.</p> <p>In Flood Zone C, where the probability of flooding is low (less than 0.1%, Flood Zone C), site-specific flood risk assessment may be required, and the developer should satisfy themselves that the probability of flooding is appropriate to the development being proposed. The Plan SFRA datasets and the most up to date Catchment Flood Risk Assessment and Management (CFRAM) Programme climate scenario mapping, should be consulted by prospective applicants for developments in this regard. SFRAs and site-specific flood risk assessment shall provide information on the implications of climate change with regard to flood risk in relevant locations. The 2009 OPW Draft Guidance on Assessment of Potential Future Scenarios for Flood Risk Management (or any superseding document) shall be consulted with to this effect.</p> <p>Applications for development on land identified as benefitting land may be prone to flooding, and as such site-specific flood risk assessments may be required in these areas.</p> <p>The Council will also, though both public and private sector development, and in collaboration with the OPW, seek opportunities to enhance biodiversity and amenity, and to ensure the protection of environmentally sensitive sites and habitats, through methods such as SUDS (refer to Chapter 15 Water and Energy Utilities), non-porous surfacing etc in new development to minimise the risk of flooding.</p> <p><b>11.5.3 Climate Change and Flooding</b></p> <p>'The Planning System and Flood Risk Management Guidelines for Planning Authorities and Technical Appendices, 2009' recommends that a 'precautionary approach' to climate change is adopted due to the level of uncertainty involved in potential effects. In contributing towards compliance with the Guidelines, climate change scenario mapping has been</p>

<sup>13</sup> Flood hazard mapping and flood risk information as set out in this Plan may change in light of further analysis and having consideration to the potential impacts of climate change. Therefore, all landowners, users and developers are advised by the Council to take all reasonable measures to assess the vulnerability to flooding of any development or property in a particular area at all times, and prior to submitting a planning application.

**Provisions including:**

considered as part of the Plan SFRA.

The Plan requires that SFRA mapping, and the most up to date Catchment Flood Risk Assessment and Management (CFRAM) Programme climate scenario mapping is consulted by prospective applicants for developments, and that it is made available to lower-tier Development Management processes in the Council.

Chapter 11.5.2 Assessing Flood Risk of this Plan requires that:

- Flood risk assessments submitted shall consider climate change impacts,
- CFRAM Programme climate scenario mapping should be consulted by prospective applicants for developments; and,
- SFRAs and site-specific flood risk assessment shall provide information on the implications of climate change with regard to flood risk in relevant locations.

**11.5.4 Arterial Drainage Schemes and Drainage Districts**

There are a number of Arterial Drainage Schemes (ADS) and Drainage Districts (DD) in Tipperary. Under the Arterial Drainage Acts, 1945 and 1995, construction and alteration of watercourses, bridges, weirs and embankments require the prior consent of the OPW. These legal requirements mainly serve to ensure that proposed construction and alteration projects do not increase the risk of flooding or have a negative impact on drainage of land. The Council will have consideration to developments proposed in ADS and DD and the impact a new development may have on these areas.

**Policy 11 - 9** Assess all new developments (both within and without designated Flood Risk Zones) in line with the 'Staged Approach' and pre-cautionary principle set out in the Planning System and Flood Risk Management Guidelines for Planning Authorities, (DEHLG, 2009) and any amendment thereof, and the following:

- (a) Require the submission of site-specific Flood Risk Assessments for developments undertaken within Flood Zones A & B and on lands subject to the mid-range future scenario floods extents, as published by the OPW. 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.
- (b) SFRAs and site-specific flood risk assessments shall provide information on the implications of climate change with regard to flood risk in relevant locations. The 2009 OPW Draft Guidance on Assessment of Potential Future Scenarios for Flood Risk Management (or any superseding document) shall be consulted with to this effect.
- (c) Ensure each flood risk management activity is examined to determine actions required to embed and provide for effective climate change adaptation as set out in the OPW Climate Change Sectoral Adaptation Plan for Flood Risk Management applicable at the time.
- (d) Applications for development on land identified as 'benefitting land' may be prone to flooding, and as such site-specific flood risk assessments may be required in these areas.
- (e) Require applications for new development, or for an extension to an existing development on land zoned for 'Social and Public' or 'Amenity' use and where a potential flood risk is identified, and where the proposed use might be vulnerable, to be subject to site-specific flood risk assessment to the satisfaction of the Council.

**Policy 11 - 10**

- (a) Flood risk assessments shall incorporate consideration of climate change impacts and adaptation measures with regard to flood risk, and,
- (b) Flood risk management planning shall determine actions to embed and provide for effective climate change adaptation as set out in the OPW 'Climate Change Sectoral Adaptation Plan for Flood Risk Management' applicable at the time.

**Policy 11 - 11**

- (a) Ensure that new developments proposed in Arterial Drainage Schemes and Drainage Districts do not result in a significant negative impact on the integrity, function and management of these areas.
- (b) Consult with the OPW in relation to proposed developments in the vicinity of Flood Relief Schemes and drainage channels and rivers for which the OPW are responsible, and to retain a strip on either side of such channels, where required, to facilitate maintenance access thereto.
- (c) Protect the integrity of any formal flood risk management infrastructure (see key flood risk infrastructure identified in Section 2.2 "Drainage, Key Flood Risk Infrastructure and Early Warning Systems" of the SFRA), thereby ensuring that any new development does not negatively impact any existing defence infrastructure or compromise any proposed new defence infrastructure.

**Objective 11 - F**

- (a) To support and facilitate the CFRAM Programme, and to support the OPW in the development and implementation of sustainable flood risk management plans and actions.
- (b) To consider, as appropriate any new and/or emerging data, including, when available, any relevant information contained in the CFRAM Flood Risk Management Plans.

**Policy 8 - J** In conjunction with Coillte and other stakeholders to support the development of forestry resources with a number of functions including, flood retention, biodiversity, water quality/catchment management and tourism and recreation.

**Policy 12 - 8** Ensure that in assessing new development, the capacity and efficiency of the national road network drainage regimes in County Tipperary will be safeguarded for national road drainage purposes.

**Provisions including:**

**Section 15.3 Sustainable Surface Water Management**, including: The Council is responsible for the on-going maintenance and monitoring of sustainable drainage systems within our towns and villages, and will seek to maintain drainage having consideration to Water Sensitive Urban Design and application of a SuDS approach. The Council will require all new development to provide a separate foul and surface water drainage system and to incorporate Water Sensitive Urban Design and a SuDS approach, where appropriate, in new development and the public realm. The provisions of Nature- Based Solutions to the Management of Rainwater and Surface Water Runoff in Urban Areas (water sensitive urban design) Best Practice Interim Guidance Document (DHLGH, 2001) and any review thereof, will apply. The Council will require the implementation of water sensitive urban design as an integral part of the design of new developments to reduce the generation of storm water run-off, and to ensure that all storm water generated is disposed of on-site or is attenuated and treated prior to discharge to an approved storm water system, with consideration to the following:...

**Volume 3 Appendix 6****2.2 Flooding**

The Council will require proposals for development to comply with requirements of the Planning System and Flood Risk Assessment Guidelines (DEHLG and OPW, 2009) and any up-dated thereof) including providing detailed design specifications as may be required to facilitate the impact of development.

(a) 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.

(b) 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, to include, but not be limited to specifications of the following:

**2.2.1 Floor Levels**

In areas of limited flood depth, the specification of the threshold and floor levels of new structures shall be raised above expected flood levels to reduce the risk of flood losses to a building, by raising floor heights within the building structure using a suspended floor arrangement or raised internal concrete platforms.

When designing an extension or modification to an existing building, an appropriate flood risk reduction measure shall be specified to ensure the threshold levels into the building are above the design flood level. However, care must also be taken to ensure access for all is provided in compliance with Part M of the Building Regulations.

Where threshold levels cannot be raised to the street for streetscape, conservation or other reasons, the design shall specify a mixing of uses vertically in buildings - with less vulnerable uses located at ground floor level, along with other measures for dealing with residual flood risk.

**2.2.2 Internal Layout**

Internal layout of internal space shall be designed and specified to reduce the impact of flooding [for example, living accommodation, essential services, storage space for provisions and equipment shall be designed to be located above the predicted flood level]. In addition, designs and specifications shall ensure that, wherever reasonably practicable, the siting of living accommodation (particularly sleeping areas) shall be above flood level.

With the exception of single storey extensions to existing properties, new single storey accommodation shall not be deemed appropriate where predicted flood levels are above design floor levels. In all cases, specifications for safe access, refuge and evacuation shall be incorporated into the design of the development.

**2.2.3 Flood-Resistant Construction**

Developments in flood vulnerable zones shall specify the use of flood-resistant construction aimed at preventing water from entering buildings - to mitigate the damage floodwater caused to buildings.

Developments shall specify the use of flood resistant construction prepared using specialist technical input to the design and specification of the external building envelope – with measures to resist hydrostatic pressure (commonly referred to as “tanking”) specified for the outside of the building fabric.

The design of the flood resistant construction shall specify the need to protect the main entry points for floodwater into buildings - including doors and windows (including gaps in sealant around frames), vents, air-bricks and gaps around conduits or pipes passing through external building fabric.

The design of the flood resistant construction shall also specify the need to protect against flood water entry through sanitary appliances as a result of backflow through the drainage system.

**2.2.4 Flood-Resilient Construction**

Developments in flood vulnerable zones that are at risk of occasional inundation shall incorporate design and specification for flood resilient construction which accepts that floodwater will enter buildings and provides for this in the design and specification of internal building services and finishes. These measures limit damage caused by floodwater and allow relatively quick recovery.

This can be achieved by specifying wall and floor materials such as ceramic tiling that can be cleaned and dried relatively easily, provided that the substrate materials (e.g. blockwork) are also resilient. Electrics, appliances and kitchen fittings

**Provisions including:**

shall also be specified to be raised above floor level, and one-way valves shall be incorporated into drainage pipes.

**2.2.5 Emergency Response Planning**

In addition to considering physical design issues for developments in flood vulnerable zones, the developer shall specify that the planning of new development also takes account of the need for effective emergency response planning for flood events in areas of new development.

Applications for developments in flood vulnerable zones shall provide details that the following measures will be put in place and maintained:

- Provision of flood warnings, evacuation plans and ensuring public awareness of flood risks to people where they live and work;
- Coordination of responses and discussion with relevant emergency services i.e. Local Authorities, Fire and Rescue, Civil Defence and An Garda Síochána through the SFRA; and
- Awareness of risks and evacuation procedures and the need for family flood plans.

**2.2.6 Access and Egress During Flood Events**

Applications for developments in flood vulnerable zones shall include details of arrangements for access and egress during flood events. Such details shall specify that: flood escape routes have been kept to publicly accessible land; such routes will have signage and other flood awareness measures in place, to inform local communities what to do in case of flooding; and this information will be provided in a welcome pack to new occupants.

**Further Information**

Further and more detailed guidance and advice can be found at <http://www.flooding.ie> and in the Building Regulations.

## 4.4 Integration of other provisions relating to flood risk management into the Local Area Plan

Further to the measures integrated into the existing, already in force, Tipperary County Development Plan 2022-2028 (see Section 4.3 above), a number of measures relating to flood risk and drainage have been integrated into the Local Area plan as detailed on Table 6 below. In combination, these provisions contribute towards a sustainable drainage strategy for the Plan area (see also Section 3.5 of this document).

**Table 6 Local Area Plan Provisions relating to Flood Risk Management**

Provision	
Policy 8.4	Require that all development proposals in Nenagh integrate SUDS and nature-based solutions to SUDS as part of an overall sustainable urban drainage and urban greening approach (refer also to Section 3.5 of the accompanying SFRA, "Sustainable Urban Drainage Systems and Surface Water Guidance and Strategy"), unless they are demonstrated to be operationally unfeasible to the satisfaction of the Council.
Policy 8.5	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: <ol style="list-style-type: none"> <li>a) 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>b) 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>c) 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>d) 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</li> </ol>

Provision	
	<p>during flood events. Flood Risk Assessments shall apply the precautionary approach recommended in the Guidelines and shall be informed by the advice on the expected impacts of climate change and the allowances to be provided for future flood risk management provided in the OPW's (2019) Flood Risk Management Climate Change Sectoral Adaptation Plan and the guidance on potential future scenarios contained therein.</p> <p>e) 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. For the avoidance of doubt, the Office of Public Works' Preliminary Flood Risk Assessment indicative pluvial maps (2012) are not considered to be reliable for assessing pluvial risk.</p> <p>f) Any planning application within Defended Areas (refer to SFRA for more details) shall demonstrate that residual risks have been considered and include measures for their management as appropriate.</p>
Objective 8B	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.
Objective 8D	Support and work in co-operation with the Office of Public Works in the design, development and implementation of the Nenagh Flood Relief Scheme. To also contribute towards the protection of key flood risk infrastructure, such as the embankment at Lisbunney Industrial Estate, from interference or removal.
Text from Section 8.3 Sustainable Surface Water Management	<p>The Council and Uisce Éireann are responsible for the on-going maintenance and monitoring of sustainable drainage systems and will seek to maintain 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 Uisce Éireann to maximise the capacity of existing collection systems for foul water. Therefore, the discharge of additional surface water to combined (foul and surface water) sewers is not permitted. The removal of stormwater from combined sewers as part of roads, public realm, residential or other developments must be incorporated in new developments where feasible.</p> <p>The Council will require new development in Nenagh to provide separate foul and surface water drainage systems and to incorporate water sensitive urban design and nature-based SUDS. The provisions of 'Nature-Based Solutions to the Management of Rainwater and Surface Water Runoff in Urban Areas' (water sensitive urban design) Best Practice Interim Guidance Document (DHLGH, 2001) and any review there off, will apply.</p>
Text from Section 8.5 Flood Risk Management	<p>A Strategic Flood Risk Assessment (SFRA), as required by 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (Department of the Environment, Heritage and Local Government and Office of Public Works, 2009) and Circular PL 2/2014 (Department of Environment, Community and Local Government), has been undertaken alongside the preparation of the SEA and the preparation of the LAP. Flood risk from fluvial sources informed the land use zoning provided for by the Plan.</p> <p>Parts of the town benefit from Arterial Drainage Schemes and to ensure these arterial schemes remain effective into the future, new development will be required to have regard to these schemes and benefitting areas in line with Policy 11-11 of the TCDP. Details of schemes can be found on <a href="http://www.floodinfo.ie">www.floodinfo.ie</a></p> <p>The SFRA focused on land use zoning as well as flood risk management policy and has considered available, and emerging information on flood risk indicators, including the OPW's Flood Hazard and Risk Mapping and any flood defences. In line with the Guidelines, this demonstrates that Tipperary County Council have considered such climate change impacts in the preparation of this Plan, by avoiding development in areas potentially prone to flooding in the future. Overlays Land Use Zoning and National CFRAM potential future scenario mapping have been included in the SFRA. Various flood risk management provisions from the County Development Plan and the Local Area Plan explicitly integrate climate change considerations. This includes Policy 8.5(d) outlined below. In line with the requirements of the Flood Risk Guidelines, Flood Zones A and B have been identified for Nenagh and are outlined below (also shown on Maps 1A and 1B):</p> <p><i>- Refer to Appendix II of this SFRA and Section 8.5 and Maps 1A and 1B of the Plan for mapping of Flood Zones A and B -</i></p> <p>Areas that are located in flood risk zoned are generally not zoned for uses that are vulnerable to flooding. In cases where a site is zoned for use in an area at flood risk, a detailed 'Justification' test was carried out as part of the SFRA (see Appendix 6).</p> <p>In addition to the Flood Zones A and B as identified, there are areas in Nenagh, due to its underlying geology, that may be subject to intermittent ground water and pluvial flooding. Therefore, the Council will require that groundwater and pluvial risks are considered by any site-specific flood risk assessment undertaken at project level, in compliance with the Flood Risk Management Guidelines.</p> <p>New proposals for minor flood relief works are also being progressed in Nenagh to alleviate flood risk in the town. In consultation with the OPW, the Council will support the development of flood relief schemes in the town and will also contribute towards the protection of key flood risk infrastructure, including the Nenagh Flood Defence Scheme, from interference or removal.</p>



<b>Provision</b>	
Text from Table 9.2 Zoning Matrix	<p>Note on Land Use Zoning Objectives and Matrix:</p> <p>The limitation described in this note applies to a relatively small number of instances where Flood Risk Zones A and B overlap with certain Land Use Zoning objectives. Uses under all Land Use Zoning Objectives (apart from where the Justification Test outlined in the Flood Risk Management Plan has been passed) shall be limited to water-compatible uses in Flood Zone A, and less vulnerable or water compatible uses in Flood Zone B (as per the Flood Risk Management Guidelines), and detailed site-specific Flood Risk Assessment will be required in these areas. This limitation shall take primacy over any other provision relating to these land use zoning objectives.</p> <p>The Justification Test has been passed for the following Land Use Zonings:</p> <ul style="list-style-type: none"> <li>• Various parts of the Town Centre; mixed uses (zoned Urban Core and Regeneration);</li> <li>• Existing Waste Water Treatment Plant (zoned Employment);</li> <li>• Existing Nenagh Leisure Centre (zoned Community and Services Infrastructure);</li> <li>• Areas associated with St. Joseph’s CBS (zoned Community and Services Infrastructure); and</li> <li>• Residential Development (zoned Residential).</li> </ul>
Text after Figure 11	<p>Some lands zoned for ‘New Residential’ development within the plan fall within a flood zone but benefit from an extant planning permission. If amendments are required to this planning permission or a new planning permission is sought on these lands, the applicant will be required to re-examine the flood risk on the lands, and ensure best practices are provided for and a precautionary approach is taken, including re-designing elements of the proposal to provide open space where flood risk occurs on the lands.</p>

## Section 5 Conclusion

Tipperary County Council has adopted a Local Area Plan (LAP) for Nenagh under the Planning and Development Act 2000 (as amended). The Plan sets out an overall strategy for the proper planning and sustainable development of Nenagh and Environs over the years 2024-2030.

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

The LAP should be read in conjunction with the Tipperary County Development Plan 2022-2028, which sets out the overarching development strategy for the County. Where conflicting objectives arise between the County Development Plan and the LAP, the objectives of the relevant County Development Plan shall take precedence.

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

Land use zoning contained within the Plan has been informed by the SFRA process and associated delineation of flood risk zones. The detailed Plan preparation process undertaken by the Planning Department combined with specialist input from the SFRA process facilitated zoning that helps to avoid inappropriate development being permitted in areas of high flood risk.

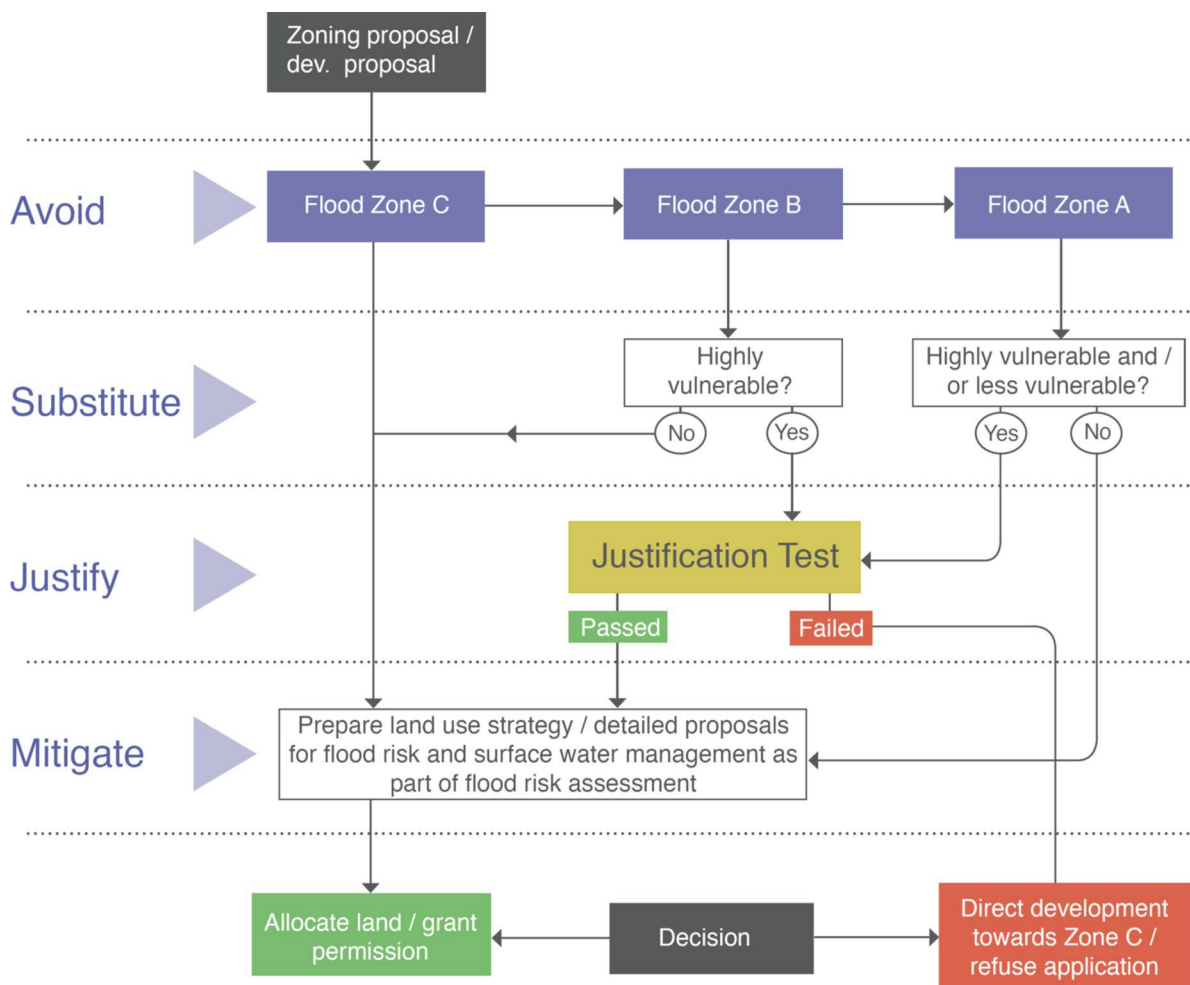
# Appendix I: Summary of the requirements of the Flood Guidelines for land uses in Flood Zones

Requirements relating to land uses in Flood Zones as set out in the Department of Environment, Heritage and Local Government (DEHLG) and Office of Public Works (OPW) 2009 Flood Guidelines (including at Chapter 3 Principles and Key Mechanisms and Chapter 5 Flooding and Development Management) and Departmental Circular PL2/2014 should be adhered to.

## - The Sequential Approach, including the Justification test -

The key principles of the Guidelines' risk-based sequential approach (see Figure 1) are:

- Avoid development in areas at risk of flooding. If this is not possible, consider substituting a land use that is less vulnerable to flooding. Only when both avoidance and substitution cannot take place should consideration be given to mitigation and management of risks.
- Inappropriate types of development that would create unacceptable risks from flooding should not be planned for or permitted.
- Exceptions to the restriction of development due to potential flood risks are provided for through the use of a Justification Test, where the planning need and the sustainable management of flood risk to an acceptable level must be demonstrated.



**Figure 1 Sequential Approach Process<sup>14</sup>**

<sup>14</sup> Flood Zone C covers all areas outside of Zones A and B

In summary, the **planning implications** for each of the flood zones are:

**Zone A** - High probability of flooding. Most types of development would be considered inappropriate in this zone. Development in this zone should be avoided and/or only considered in exceptional circumstances, such as in city and town centres, or in the case of essential infrastructure that cannot be located elsewhere, and where the Justification Test has been applied. Only water-compatible development, such as docks and marinas, dockside activities that require a waterside location, amenity open space, outdoor sports and recreation, would be considered appropriate in this zone.

**Zone B** - Moderate probability of flooding. Highly vulnerable development, such as hospitals, residential care homes, Garda, fire and ambulance stations, dwelling houses and primary strategic transport and utilities infrastructure, would generally be considered inappropriate in this zone, unless the requirements of the Justification Test can be met. Less vulnerable development, such as retail, commercial and industrial uses, sites used for short-let for caravans and camping and secondary strategic transport and utilities infrastructure, and water-compatible development might be considered appropriate in this zone. In general however, less vulnerable development should only be considered in this zone if adequate lands or sites are not available in Zone C and subject to a flood risk assessment to the appropriate level of detail to demonstrate that flood risk to and from the development can or will adequately be managed.

**Zone C** - Low probability of flooding. Development in this zone is appropriate from a flood risk perspective (subject to assessment of flood hazard from sources other than rivers and the coast) but would need to meet the normal range of other proper planning and sustainable development considerations.

Table 7 overleaf classifies the vulnerability of different types of development while Table 8 identifies the appropriateness of development belonging to each vulnerability class within each of the flood zones as well as identifying what instances in which the Justification Test should be undertaken. Inappropriate development that does not meet the criteria of the Justification Test should not be considered at the plan-making stage or approved within the development management process.

**Table 7 Classification of vulnerability of different types of development**

Vulnerability class	Land uses and types of development which include*:
<b>Highly vulnerable development (including essential infrastructure)</b>	<p>Garda, ambulance and fire stations and command centres required to be operational during flooding;</p> <p>Hospitals;</p> <p>Emergency access and egress points;</p> <p>Schools;</p> <p>Dwelling houses, student halls of residence and hostels;</p> <p>Residential institutions such as residential care homes, children’s homes and social services homes;</p> <p>Caravans and mobile home parks;</p> <p>Dwelling houses designed, constructed or adapted for the elderly or, other people with impaired mobility; and</p> <p>Essential infrastructure, such as primary transport and utilities distribution, including electricity generating power stations and sub-stations, water and sewage treatment, and potential significant sources of pollution (SEVESO sites, IPPC sites, etc.) in the event of flooding.</p>
<b>Less vulnerable development</b>	<p>Buildings used for: retail, leisure, warehousing, commercial, industrial and non-residential institutions;</p> <p>Land and buildings used for holiday or short-let caravans and camping, subject to specific warning and evacuation plans;</p> <p>Land and buildings used for agriculture and forestry;</p> <p>Waste treatment (except landfill and hazardous waste);</p> <p>Mineral working and processing; and</p> <p>Local transport infrastructure.</p>
<b>Water-compatible development</b>	<p>Flood control infrastructure;</p> <p>Docks, marinas and wharves;</p> <p>Navigation facilities;</p> <p>Ship building, repairing and dismantling, dockside fish processing and refrigeration and compatible activities requiring a waterside location;</p> <p>Water-based recreation and tourism (excluding sleeping accommodation);</p> <p>Lifeguard and coastguard stations;</p> <p>Amenity open space, outdoor sports and recreation and essential facilities such as changing rooms; and</p> <p>Essential ancillary sleeping or residential accommodation for staff required by uses in this category (subject to a specific warning and evacuation plan).</p>
*Uses not listed here should be considered on their own merits	

**Table 8 Vulnerability Classes and Flood Zones**

	Flood Zone A	Flood Zone B	Flood Zone C
Highly vulnerable development (including essential infrastructure)	Justification Test	Justification Test	Appropriate
Less vulnerable development	Justification Test	Appropriate	Appropriate
Water-compatible development	Appropriate	Appropriate	Appropriate

The **Justification Test** which is referred to as part of the Sequential Approach is an assessment of whether a development proposal within an area at risk of flooding meets specific criteria for proper planning and sustainable development and demonstrates that it will not be subject to unacceptable risk nor increase flood risk elsewhere. The Justification Test should be applied only where development is within flood risk areas that would be defined as inappropriate under the screening test of the sequential risk based approach outlined above. This Justification Test is shown below.

Where, as part of the preparation and adoption or variation and amendment of a development/local area plan<sup>1</sup>, a planning authority is considering the future development of areas in an urban settlement that are at moderate or high risk of flooding, for uses or development vulnerable to flooding that would generally be inappropriate as set out in Table 3.2, all of the following criteria must be satisfied:

- 1 The urban settlement is targeted for growth under the National Spatial Strategy, regional planning guidelines, statutory plans as defined above or under the Planning Guidelines or Planning Directives provisions of the Planning and Development Act, 2000, as amended.
- 2 The zoning or designation of the lands for the particular use or development type is required to achieve the proper planning and sustainable development of the urban settlement and, in particular:
  - (i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement<sup>2</sup>;
  - (ii) Comprises significant previously developed and/or under-utilised lands;
  - (iii) Is within or adjoining the core<sup>3</sup> of an established or designated urban settlement;
  - (iv) Will be essential in achieving compact and sustainable urban growth; and
  - (v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement<sup>4</sup>.
- 3 A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.
 

N.B. The acceptability or otherwise of levels of any residual risk should be made with consideration for the proposed development and the local context and should be described in the relevant flood risk assessment.

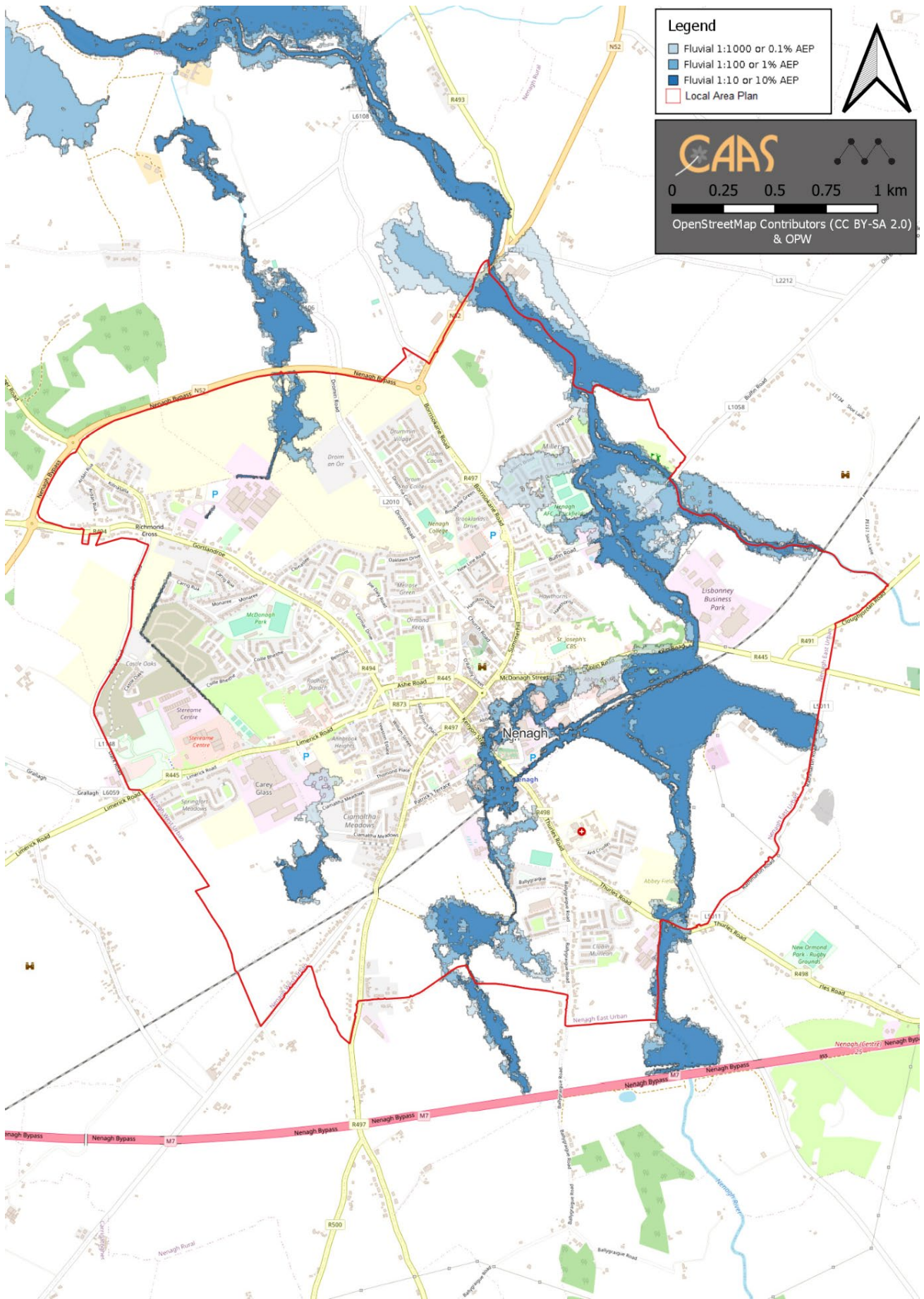
**Figure 2 Justification Test** <sup>15</sup>

<sup>15</sup>Footnotes: <sup>1</sup> Including Strategic Development Zones and Section 25 Schemes in the area of the Dublin Docklands Development Authority <sup>2</sup>In the case of Gateway planning authorities, where a number of strategic growth centres have been identified within the overall area of the authority, the Justification Test may be applied for vulnerable development within each centre. <sup>3</sup> See definition of the core of an urban settlement in Glossary of Terms. <sup>4</sup> This criterion may be set aside where section 4.27b applies.

# Appendix II: Flood Risk Indicator and Zone Mapping

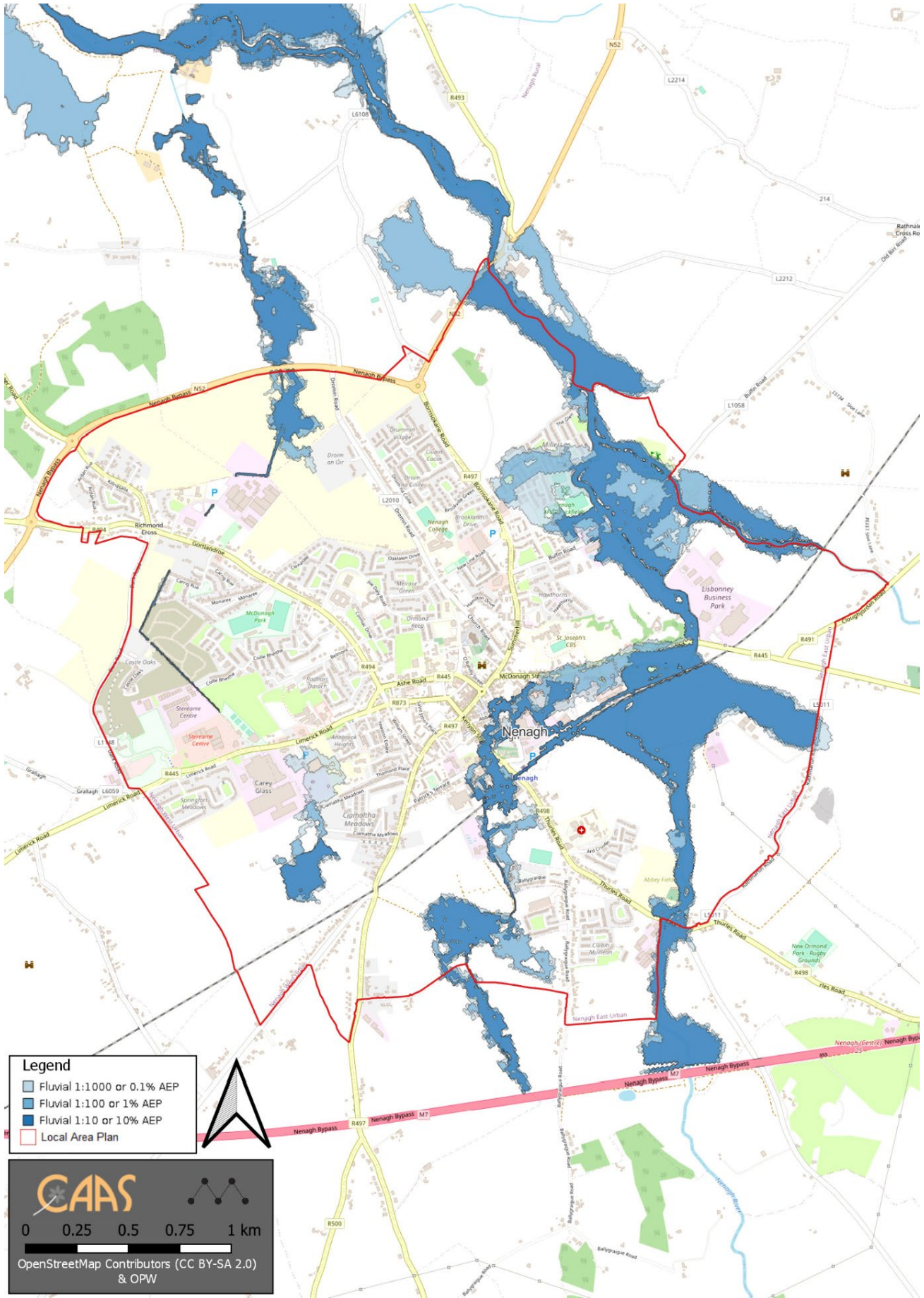


## Selection of Historical Indicators

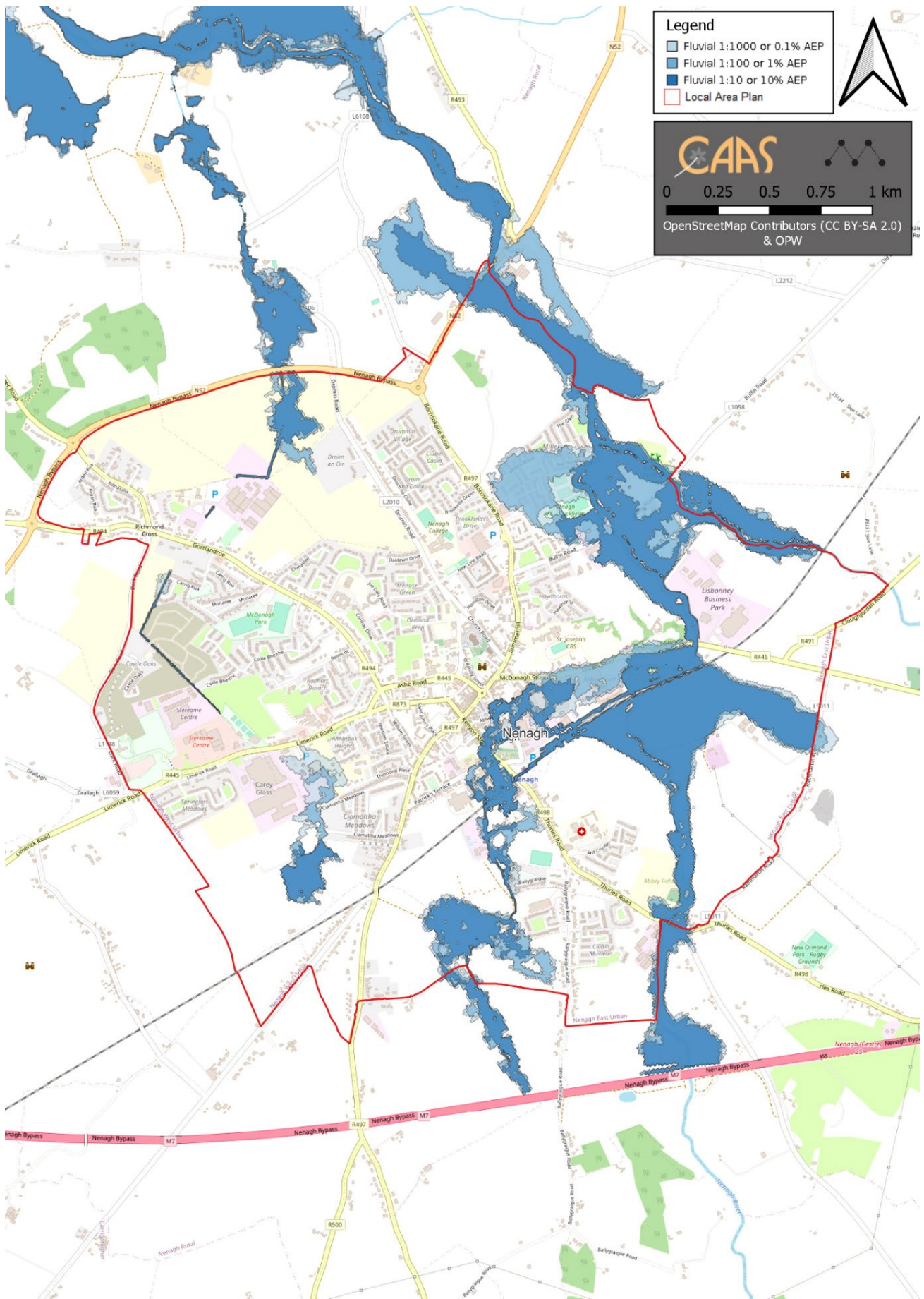


**CFRAMS Present Day Scenario**

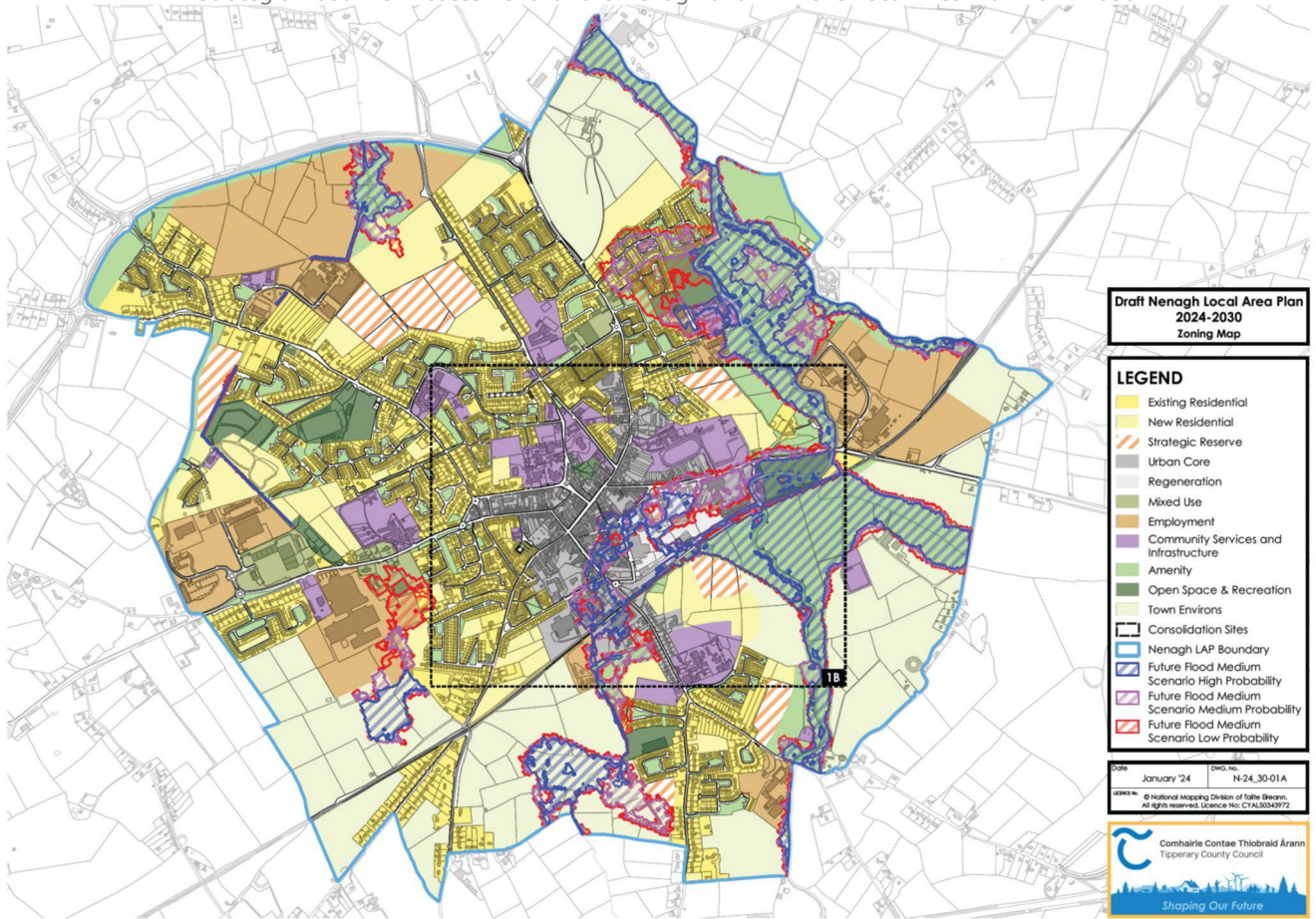




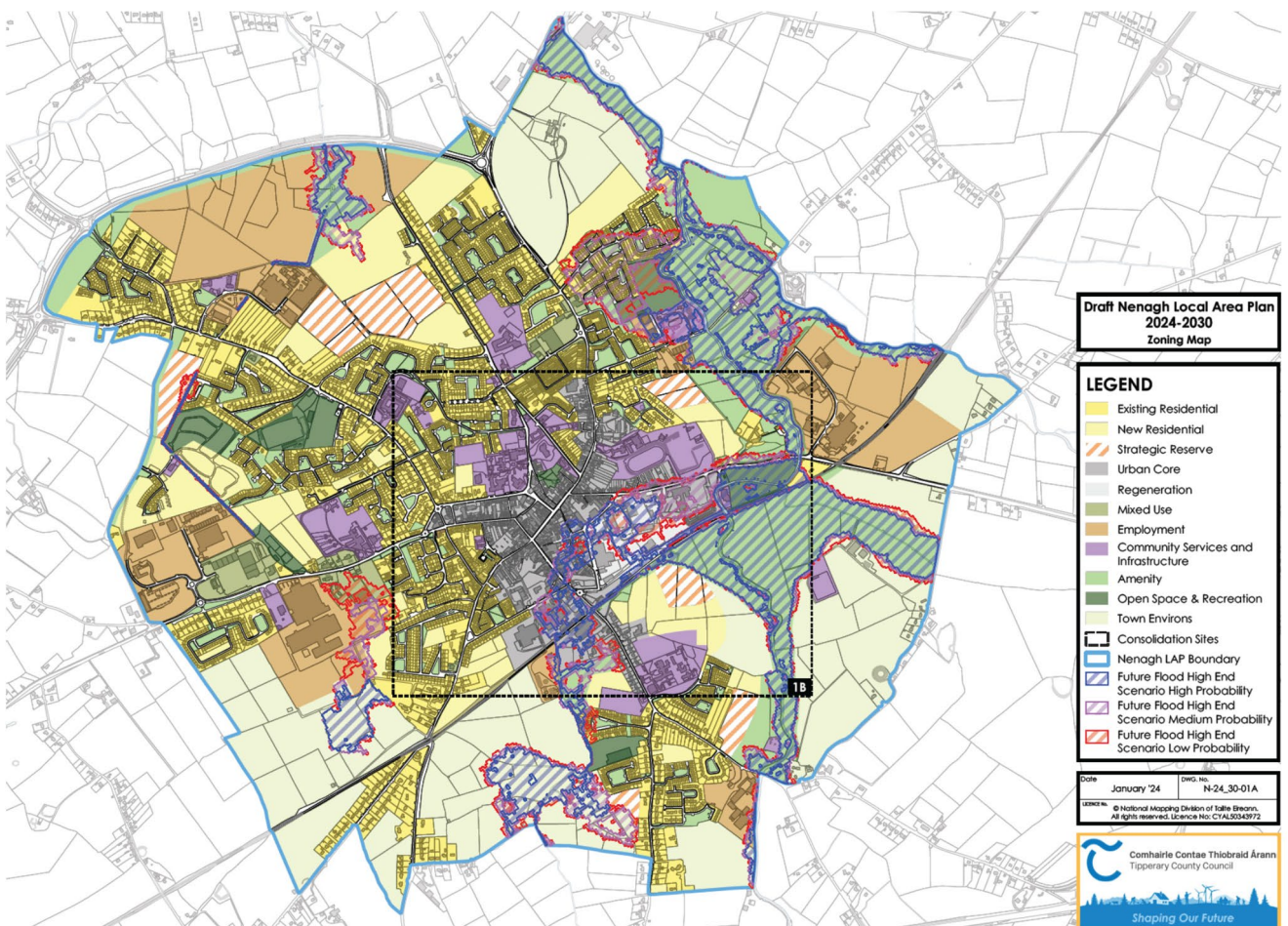
**CFRAMS Mid-Range Future Scenario**



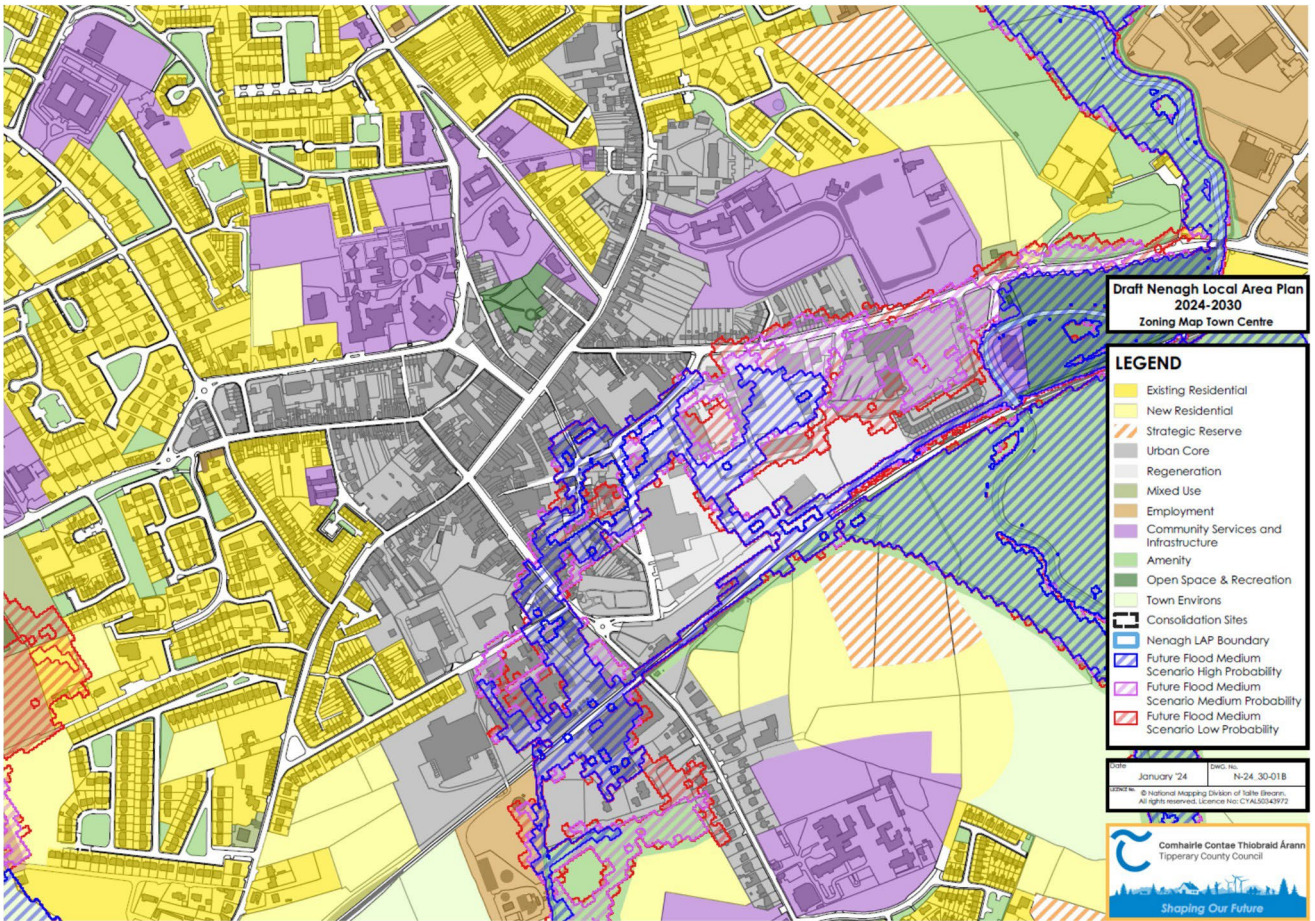
**CFRAMS High-End Future Scenario**



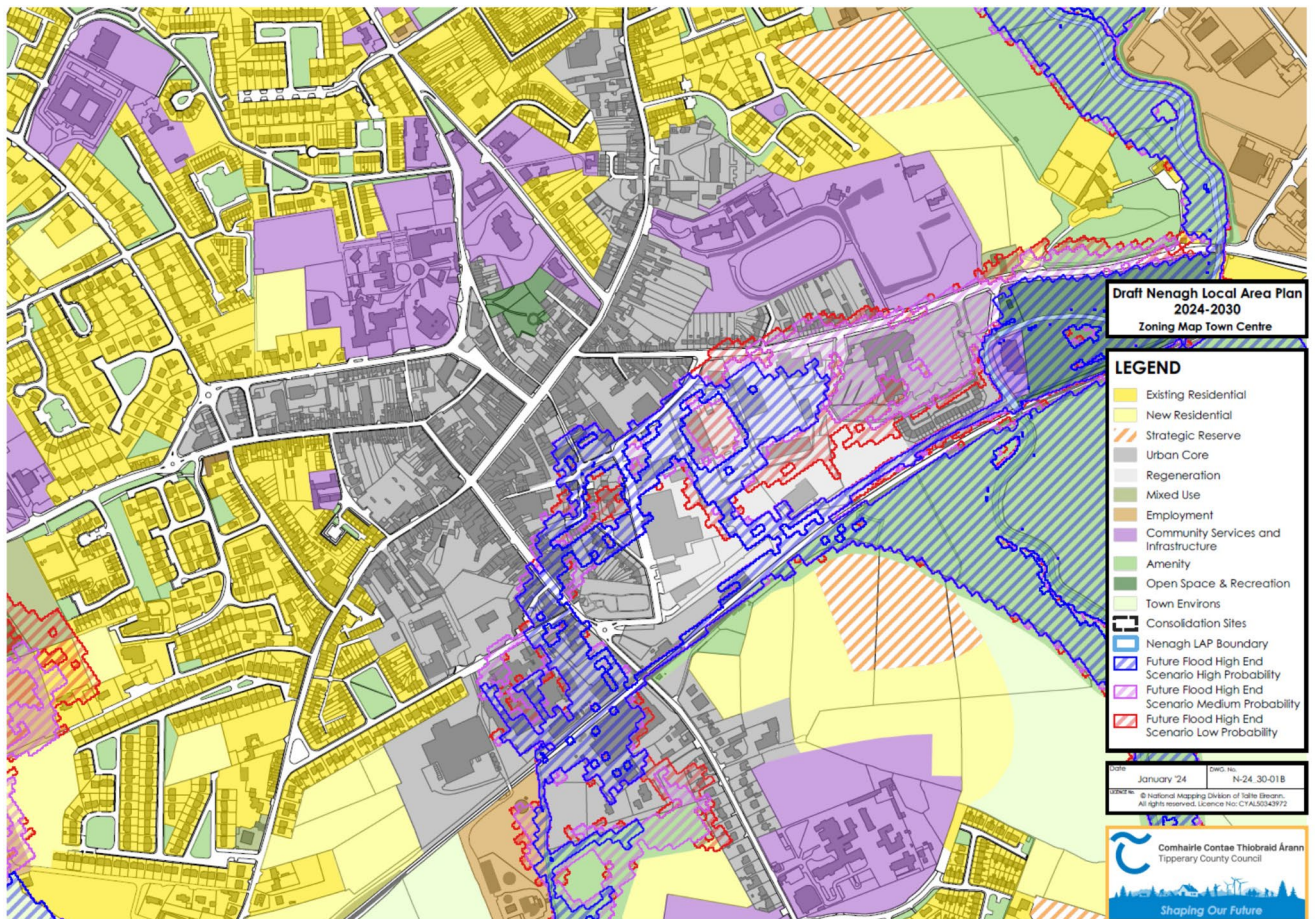
**1A Zoning with Mid-Range Future Scenario**



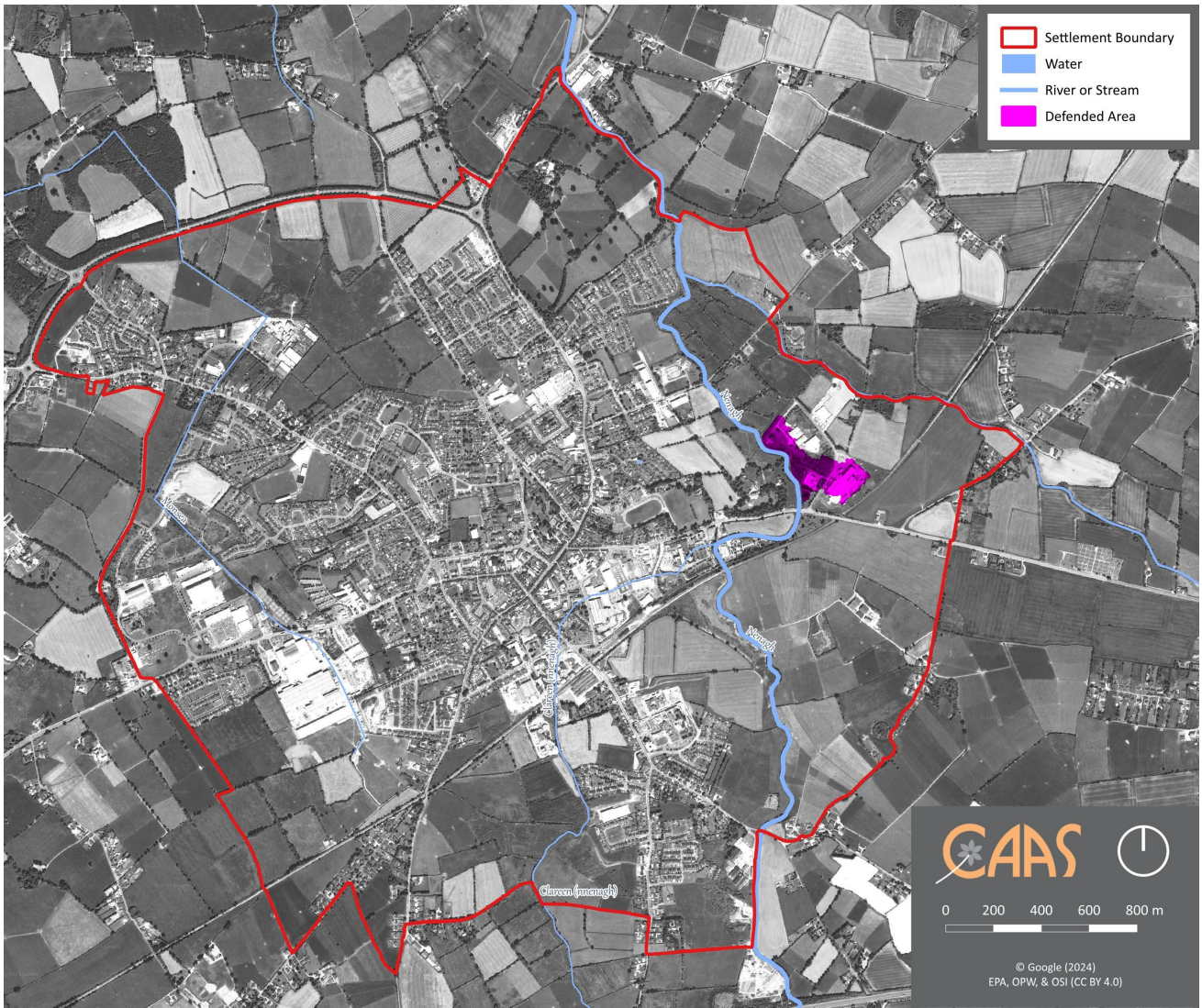
**1A Zoning with High-End Future Scenario**



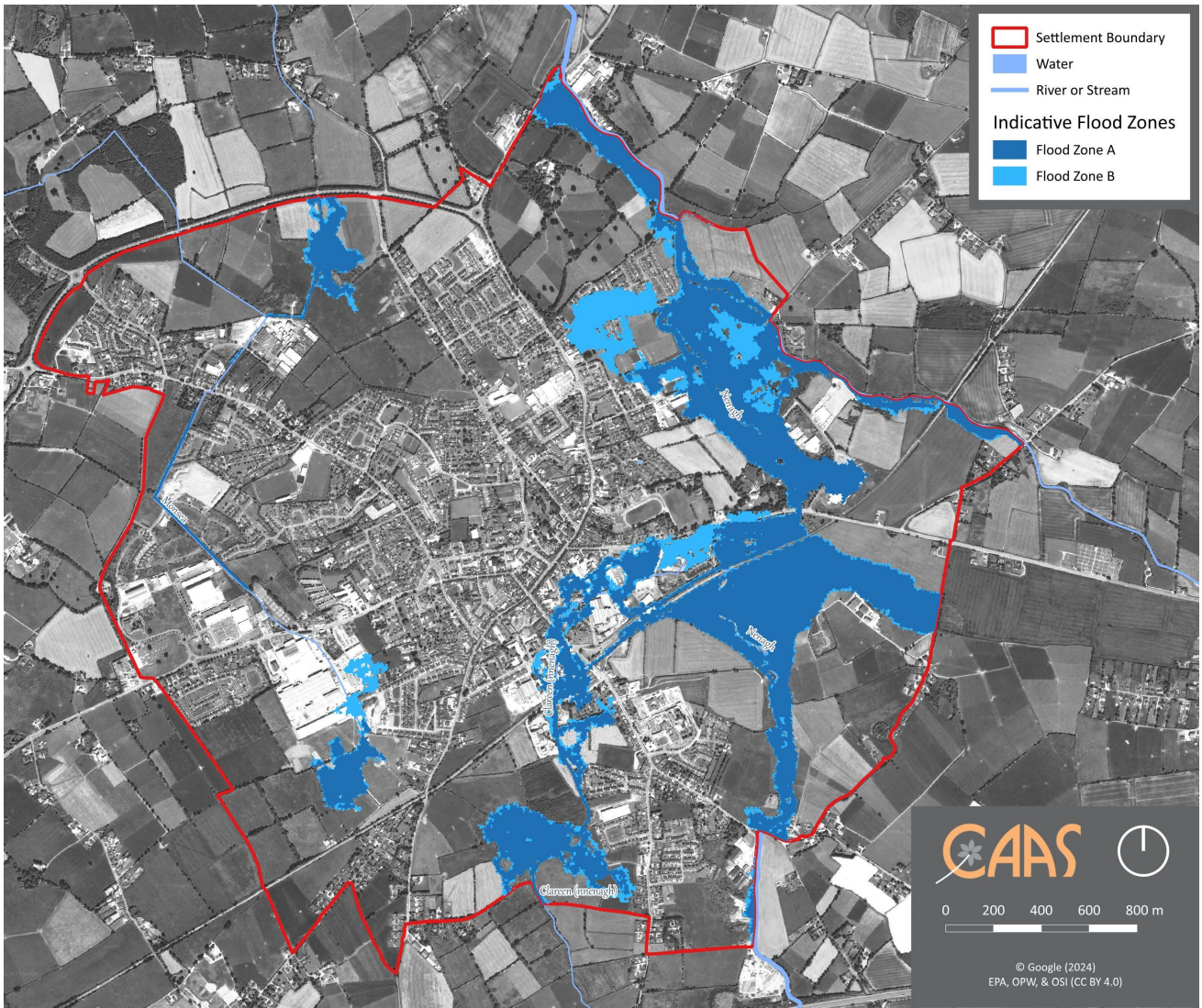
**1B Zoning with Mid-Range Future Scenario**



**1B Zoning with High-End Future Scenario**



**Defended Area**



**Flood Zones A and B**