SEA ENVIRONMENTAL REPORT

FOR THE

TUAM LOCAL AREA PLAN 2023-2029

for: Galway County Council

Áras an Chontae Prospect Hill Galway



by: CAAS Ltd.

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List of Abbreviations

AA Appropriate Assessment CAFE Cleaner Air for Europe

CORINE Catchment Flood Risk Assessment and Management Co-ORdinated Information on the Environment

CSO Central Statistics Office

DAFM Department of Agriculture, Food and Marine

DCHG Department of Culture, Heritage and the Gaeltacht

DECC Department of the Environment, Climate and Communications **DEHLG** Department of the Environment, Heritage and Local Government

DHLGH Department of Housing, Local Government and Heritage

EIA Environmental Impact Assessment
EPA Environmental Protection Agency
EQS Environmental Quality Standard
ELVs Emission Discharge Values

EU European Union

GFC Gross Final Consumption
GSI Geological Survey of Ireland

LCA Landscape Character Assessment

NHA Natural Heritage Area

NIAH National Inventory of Architectural Heritage

NTA National Transport Authority

OPW Office of Public Works

pNHA proposed Natural Heritage Area

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

RBMP River Basin Management Plan RMP Record of Monuments and Places

RPA Register of Protected Areas

RSES Regional Spatial and Economic Strategy

SAC Special Area of Conservation

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

SPA Special Protection Area

SuDS Sustainable urban Drainage systems

WHO World Health Organisation
WFD Water Framework Directive

WRZ Water Resource Zone

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 27th 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 Tuam Local Area Plan 2023-2029. It has been undertaken by CAAS Ltd. on behalf of Galway 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 Directive¹, which introduced the requirement that SEA be carried out on plans and programmes that are prepared for a number of sectors, including land use planning.

1.2 Implications for the Planning Authority

SEA identifies the likely significant environmental effects of implementing the Plan. The findings of the SEA are expressed in this Environmental Report, 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 in the town – thereby facilitating the general avoidance of incompatible development in the most sensitive, least well-serviced and least well-connected areas, in the town and beyond.

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

The Plan directs incompatible development away from the most sensitive areas in the town and focuses on directing compact, sustainable development within the existing envelope of the Plan area. Development of

¹ Directive 2001/42/EC of the European Parliament and of the Council of Ministers, of 27th 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).

these generally more robust, well-serviced and well-connected areas of the town will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation.

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

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

Section 2 The Plan

2.1 Introduction

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

LAPs are required to be consistent with the 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 Galway 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 County Development Plan shall take precedence.

2.2 Content of the Plan

The LAP sets out an overall strategy for the proper planning and sustainable development of Tuam in the context of Project Ireland 2040, the National Planning Framework, the Regional Spatial and Economic Strategy for the Western and Northern Region and the Galway 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 LAP is set out across three sections as follow:

- Section 1: This section contains the Written Statement for the LAP, which includes a zoning matrix table, the development strategy for the life of the Plan and a suite of Policy Objectives.
- Section 2: This section contains the land use zoning and Strategic Flood Risk Assessment maps.
- Section 3: Local Transport Plan.

2.3 Vision and Strategic Aims

The LAP is underpinned by both a vision and strategic aims.

The Vision is: "To promote Tuam as a thriving, vibrant market town, providing a focus for future residential, economic & social development sustainably, encouraging new development and capitalising on the town's unique historical identity and character, as well as its accessibility, thereby realising Tuam's potential as well as supporting the surrounding rural hinterland."

The Strategic Aims are:

- Promote development of the Town Centre to enhance the vitality and viability of Tuam with a focus on providing for retail, commercial and residential development. Development will be focused within the town centre to act as the economic, social and cultural hub of the town.
- Support investment in regeneration and other town centre improvement works to maintain Tuam as an attractive place to work and visit
- Ensure sustainable settlement patterns, including the provision of necessary planning framework to accommodate educational, community, leisure and recreational facilities to satisfactorily complement the population increase.
- Tuam is strategically located as a centre for growth in North Connaught, it has excellent connections to the motorway route from Limerick to Sligo as well as motorway linkages to Galway and Dublin. It has the opportunity to develop as the focus for future development in North Connaught providing the infrastructure and services for its surrounding small towns/villages and rural lands.
- Promote future residential development in Tuam with

sustainable, liveable and safe neighbourhoods supported by good quality services and infrastructure as appropriate, including social infrastructure with retail, community and amenity areas.

- Encourage the promotion of sustainable mobility, including walking and cycling, in accordance with the aspirations of the Local Transport Plan and support the continued provision of investment in public transport.
- Recognises the town's potential as an attractive place for people and locals to enjoy by promoting local amenities such as St. Joseph's Park, Tuam Stadium, local sporting facilities such as a rugby club, GAA club and football clubs and Leisure Centre.
- Promoting and facilitating appropriate growth of the Town, while protecting the built, cultural and natural heritage of Tuam in accordance with applicable legislation and policy. This also includes consideration of particular features of Tuam capitalising on the existing historic fabric of the town. Supporting development in Tuam in a sensitive manner which conserves and protects the historic core, recognising the towns cultural and historic built environment as a valuable asset.

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

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

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

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

2.5 Relationship with other relevant Plans and Programmes

It is acknowledged that many of the major issues affecting Tuam'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, 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 I^2 Appendix (see also, Section "Environmental Baseline", Section 5 "Strategic Environmental Objectives", Section 6 "Description of Alternatives" and Section 9 "Mitigation Measures"). These documents have been subject to their own environmental assessment processes, as relevant.

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

CAAS for Galway County Council

² 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.

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 AA is that the Plan will not affect the integrity of the European Sites, alone or in combination with other plans or projects.³

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.

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

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.

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

⁽a) no alternative solution available,

⁽c) adequate compensatory measures in place.

3.3 Strategic Flood Risk Assessment

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

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

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 Directive⁴.

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 Council⁵.

⁴ 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

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

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

3.5 Alternatives

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

3.6 Environmental Report

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

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

An earlier version of this report was 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.

factors.

⁵ 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 City Council; Mayo County Council; Roscommon County Council; Offaly County Council; Tipperary County Council; and Clare 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

Information Required to be included in the Environmental Report	Corresponding Section of this Report, including
(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-making⁶.

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

⁶ 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.

become the climate-neutral and climate resilient society and economy that it aspires to be.

Air Quality

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

Nature

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

Water Quality

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

Marine

Reduce the human-induced pressures on the marine environment.

Clean Energy

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

Environmentally Sustainable Agriculture

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

Water Services

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

Circular Economy

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

Land Use

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

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

4.3 Sustainable Development Goals

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

- Goal 3. Ensure healthy lives and promote wellbeing for all at all ages.
- 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) bv facilitating development of lands (including those within and adjacent to the Plan area) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced elsewhere in the Plan area and beyond.
- Contribution towards the maintenance of existing green infrastructure and associated

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

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

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

 Arising from both construction and operation of development and associated infrastructure:

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

4.5 Natural Capital and Ecosystem Services

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

In recognition of the need to manage natural capital, provisions have been integrated into the Local Area Plan and the associated highertier Galway 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 There are four main types; wellbeing. provisioning, regulating, supporting cultural services. Provisioning services are the products obtained from ecosystems such as food, fresh water, wood, fibre, genetic resources and medicines. Regulating services are defined as the benefits obtained from the regulation of ecosystem processes such as climate regulation, natural hazard regulation, water purification and waste management, pollination or pest control. Support services highlight the importance of ecosystems to provide habitat for migratory species and to maintain the viability of gene-pools. Cultural services include non-material benefits that people obtain from ecosystems such as

spiritual enrichment, intellectual development, recreation and aesthetic values⁷.

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):

- 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.
- 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 Galway 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.

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

Key ecological sensitivities within and surrounding the Plan area include:

- Lough Corrib Special Area of Conservation (SAC), which includes the River Clare;
- Aquatic and riverine ecology associated with the River Clare and Nanny, including their tributaries and riparian buffer zones;
- Various trees, woodlands, parks, gardens, hedgerows and lands used for agriculture within and surrounding the Plan area, providing habitats for flora and fauna and facilitating linkages and corridors to the surrounding countryside for the wildlife.

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

- CORINE land cover mapping (including areas likely to contain a habitat listed in Annex 1 of the Habitats Directive)⁸;
- Watercourses, wetlands and peatlands;
- Other relevant County Development Plans designations;
- The EPA's Framework National Ecological Network for Ireland⁹; and
- Other sites of high biodiversity value or ecological importance as identified by, for example, the Department of Agriculture, Food and the Marine (badger sets), relevant datasets from the National Biodiversity Data Centre and BirdWatch Ireland's 'Important Bird Areas' (Crowe et al., 2009).

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

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 Conservation¹⁰ (SACs) and Special Protection

⁸ The CORINE land cover mapping classifies land cover under various headings. This dataset allows for the identification of lands that are likely to be most valuable to biodiversity including those which are likely to contain a habitat listed in Annex 1 of the Habitats Directive e.g., natural grasslands, peat bogs, salt marshes. CORINE Land Cover (CLC) is a map of the European environmental landscape based on interpretation of satellite images. Land cover is the observed physical cover, as seen from the ground or through remote sensing, including for example natural or planted vegetation, water and human constructions which cover the earth's surface.

⁹ 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.

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

Areas¹¹ (SPAs). The SEA uses the same zone of influence cited in the AA; a 15 km buffer around the Plan area (sites within this zone are mapped on Figure 4.1). The is one European site partially within the Plan area Lough Corrib SAC (Site Code: 000297)12 and four SACs, namely Levally Lough SAC (Site Code: 000295)13, Shrule Turlough SAC (Site 000525)14, Code: Derrinlough (Cloonkeenleananode) Bog SAC (Site Code: 002197)15, Greaghans Turlough SAC (Site Code: 000503)16, and one SPA, Lough Corrib SPA (Site Code: 004042)¹⁷, within 15 km of the Plan boundary, as shown on Figure 4.1.

Other hydrologically connected European sites within the wider region beyond 15 km buffer zone (i.e. downstream of the Plan boundary) are mapped on Figure 4.2 and include: Galway Bay Complex SAC (Site Code: 000268)¹⁸; and

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.

- ¹¹ 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.
- ¹² Sensitive features include: brook lamprey; oligotrophic to mesotrophic standing waters with vegetation; petrifying springs with tufa formation; calcareous fens; otter; freshwater pearl mussel; hard oligo-mesotrophic waters with benthic vegetation of Chara spp.; degraded raised bogs still capable of natural regeneration; depressions on peat substrates of the Rhynchosporion; molinia meadows on calcareous, peaty or clayey-silt-laden soils; old sessile oak woods with Ilex and Blechnum in the British Isles: lesser horseshoe bat; limestone pavements; active raised bogs; alkaline fens; Atlantic salmon; bog woodland; slender naiad; sea lamprey; semi-natural dry grasslands and scrubland facies on calcareous substrates - important orchid sites; slender green feather-moss; oligotrophic waters containing very few minerals of sandy plains; water courses of plain to montane levels with vegetation; and white-clawed crayfish.
- ¹³ Sensitive features include turloughs.
- ¹⁴ Sensitive feature include turloughs.
- ¹⁵ Sensitive features include degraded raised bogs still capable of natural regeneration.
- ¹⁶ Sensitive features include turloughs.
- ¹⁷ Sensitive features include: hen harrier; arctic tern; pochard; shoveler; tufted duck; wetland and waterbirds; black-headed gull; common gull; common scoter; common tern; coot; gadwall; golden plover; and Greenland white-fronted goose.
- ¹⁸ Senstive features include: Atlantic salt meadows; calcareous fens with *Cladium mariscus* and species of the *Caricion*; limestone pavements; Mediterranean salt meadows; mudflats and sandflats not covered by seawater at low tide; alkaline fens; perennial vegetation of stony banks; otter; coastal lagoons; harbour seal; juniperus communis formations on heaths or calcareous grasslands; salicornia and other annuals colonising mud

Inner Galway Bay SPA (Site Code: 004031)19. The AA review of all sites within this zone has allowed a determination to be made that, due to the nature and scope of the Plan, and considering the Qualifying Interests and Special Conservation Interests of European sites hydrologically connected beyond 15 km (i.e. downstream of the Plan area), the Plan is not likely to not impose any potential significant effects beyond the 15 km buffer/Zone of Influence.

For more detail on European sites please refer to the AA document that accompanies the 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 total of two NHAs and 12 pNHAs designated within and within a 15 km buffer of the Plan area, as mapped on Figure 4.3 and listed on Table 4.1. There are no NHAs or pNHAs designated within the Plan boundary.

and sand; large shallow inlets and bays; semi-natural dry grasslands and scrubland facies on calcareous substrates - important orchid sites; reefs; vegetated sea cliffs of the Atlantic and Baltic coasts; and turloughs.

¹⁹ Sensitive features include: black-headed gull; wetland and waterbirds; sandwich tern; ringed plover; great northern diver; wigeon; teal; turnstone; bar-tailed godwit; redshank; black-throated diver; common gull; common tern; cormorant; curlew; dunlin; golden plover; redbreasted merganser; grey heron; lapwing; and lightbellied brent goose.

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

NHAs and pNHAs				
Designation	Site Code	Site Name		
NHA	001255	Derrynagran Bog and Esker		
	001280	Killaclogher Bog		
pNHA	000289	Knockavanny Turlough		
	000263	Drumbulcaun Bog		
	000295	Levally Lough		
	000224	Altore Lake		
	000215	Rathbaun Turlough		
	001294	Lough Hacket		
	000331	Turlough O'Gall		
	000282	Killower Turlough		
	000234	Belclare Turlough		
	001288	Knockmaa Hill		
	001322	Turlough Monaghan		
	001788	Turloughcor		

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 2018²⁰ mapping (as shown on Figure 4.4) identifies the land cover of the Plan area as urban fabric (within central parts of the Plan area), agricultural (adjacent to the Plan area and surrounding lands), sports and leisure facilities (to the south-east of the Plan area), industrial and commercial units (to the north-west of the Plan area), mineral extractions sites to the south-east and north-west of the Plan area) and peat bogs (partially within and adjacent to the south-western parts of the Plan area – many of these are cutover).

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

Peatlands are a very characteristic habitat in County Galway, with groundwater and rain fed peat soils being a prominent and typical feature in the landscape.

Active blanket bogs and active raised bogs are priority habitats listed on Annex I of the EU Habitats Directive. Peat soils are often indicative of areas that are the most sensitive to development due to ecological sensitivities and impeded drainage issues.

Cutover bog is a variable habitat, or complex of habitats, that can include mosaics of bare peat and re-vegetated areas with woodland, scrub, heath, fen and flush or grassland communities. It occurs where part or all of the original peat has been removed through turf cutting, by the

traditional hand method or mechanically, for either domestic or commercial purposes. This habitat is widespread surrounding industrially and traditionally cutover raised bogs across the country, including County Galway. Cutaway bogs have the potential to facilitate land uses such as employment, renewable energy generation, waste management, industrial, and tourism and recreation.

Categories from CORINE mapping that may indicate areas likely to contain Annex I habitats within the Plan area include pastures and peat bogs. There are areas likely to contain Annex I Habitats occurring partially within and adjacent to western and southwestern parts of the Plan area, as shown on Figure 4.5.

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.

CAAS for Galway County Council

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

4.6.6 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, nonrenewable 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.

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

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

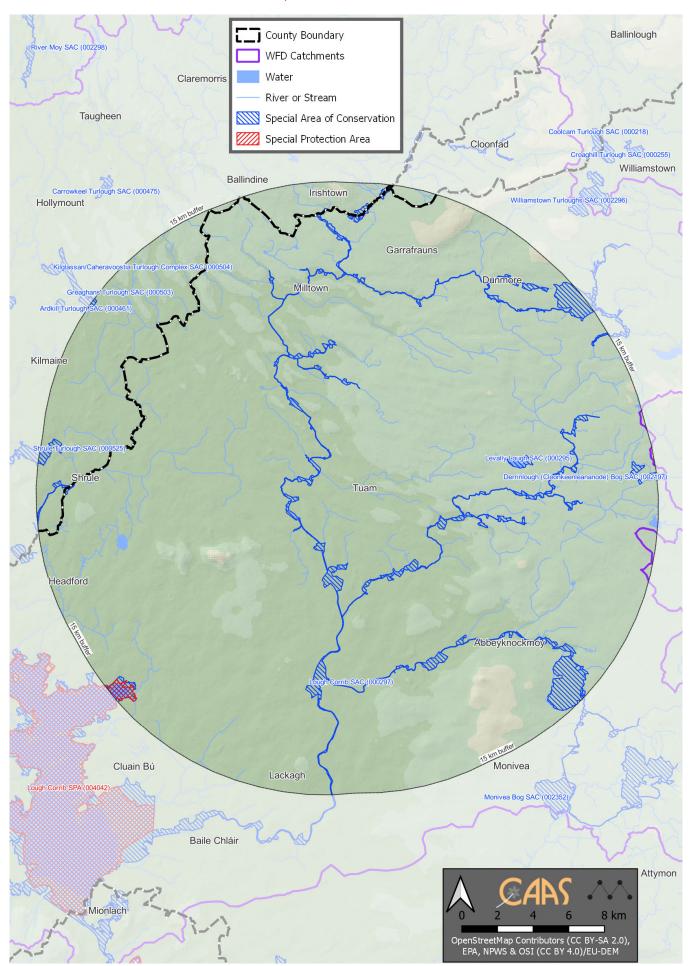


Figure 4.1 European sites within and within a 15 km buffer of Tuam Plan area

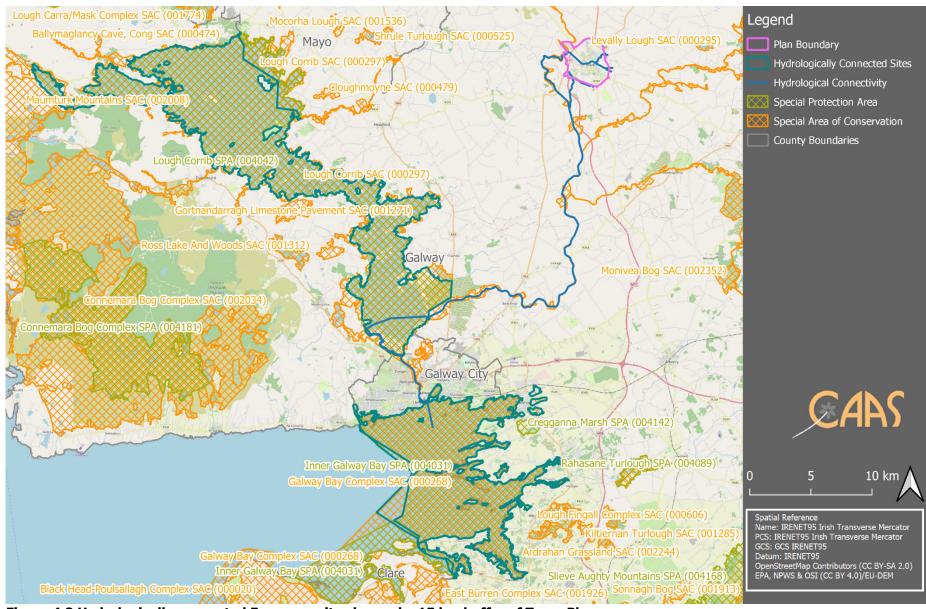


Figure 4.2 Hydrologically connected European sites beyond a 15 km buffer of Tuam Plan area

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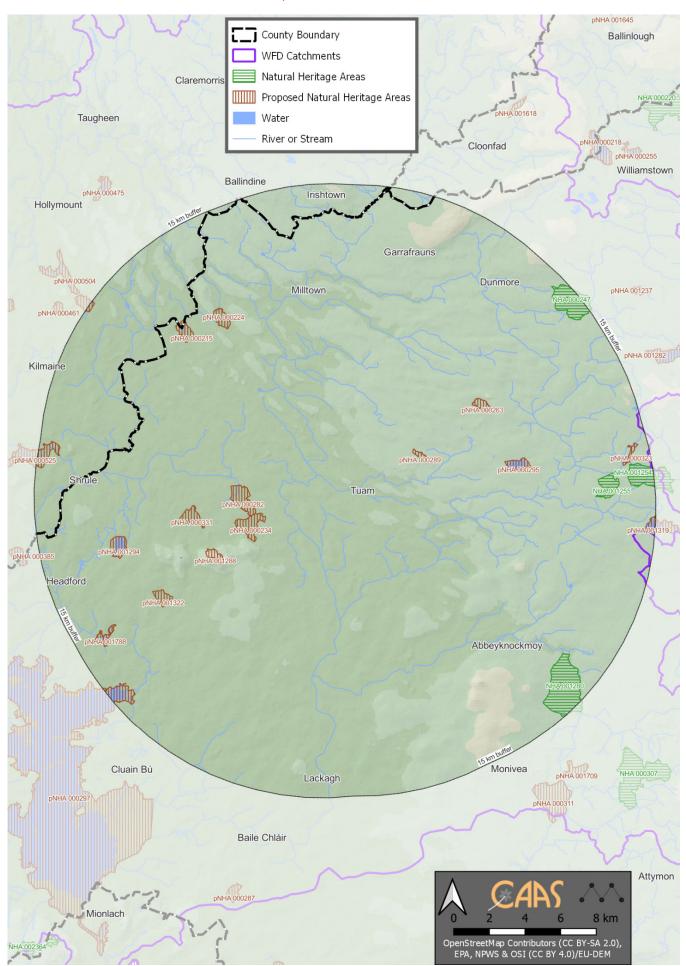


Figure 4.3 NHAs and pNHAs within and within a 15 km buffer of Tuam Plan area

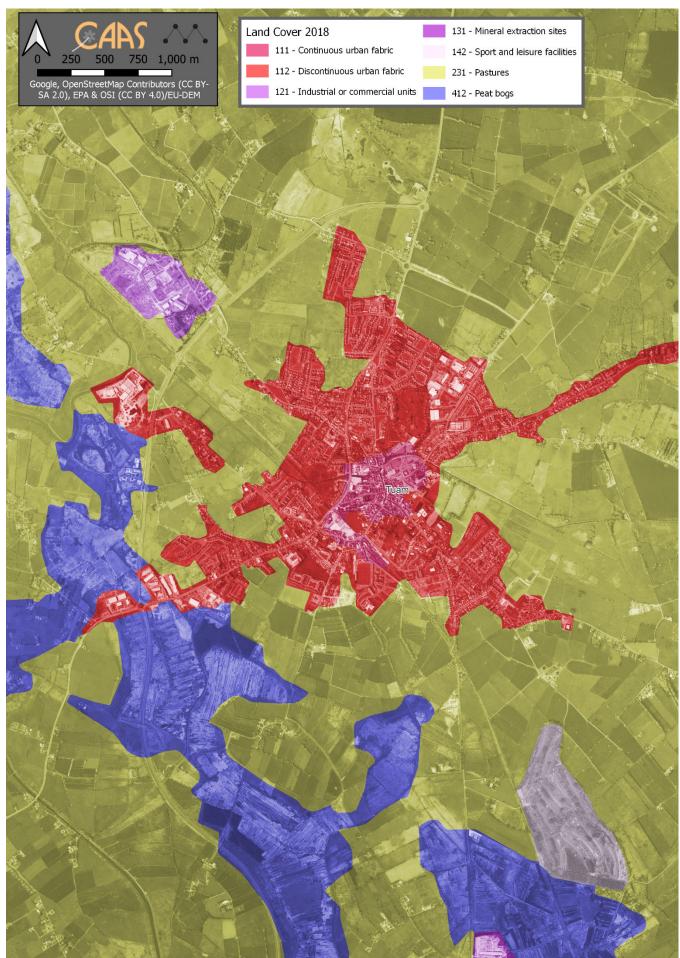


Figure 4.4 CORINE Land Cover Mapping 2018

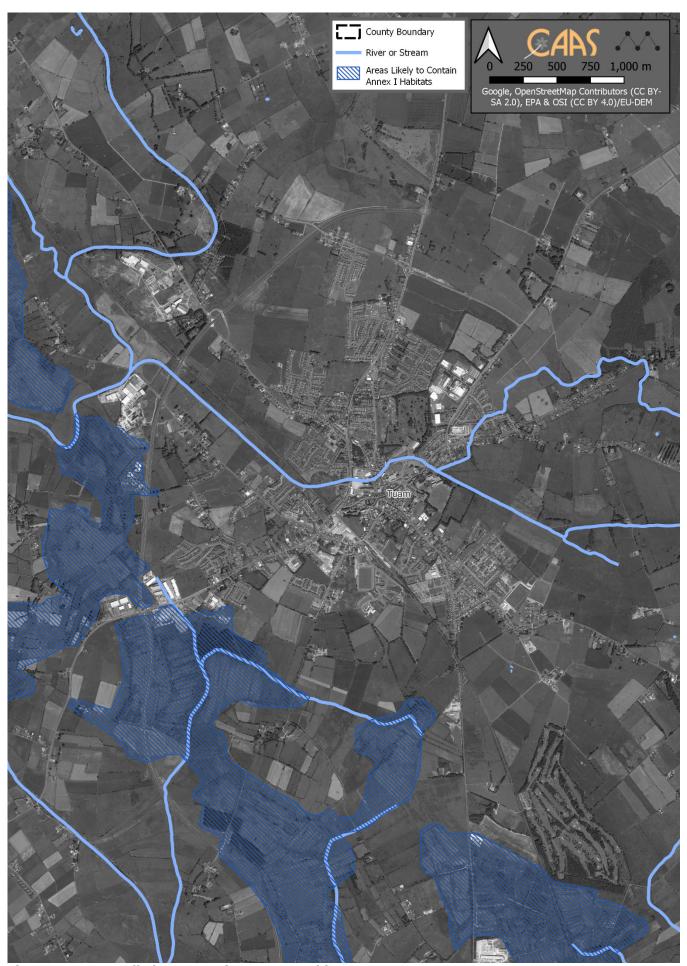


Figure 4.5 Areas Likely to Contain Annex I Habitats

4.7 Population and Human Health

4.7.1 Population

Census 2016 recorded a population of 8,767 persons in Tuam, an increase of 525 persons from the 2011 Census figure. Tuam is identified as one of eight 'Key Towns' in the Regional, Spatial and Economic Strategy 2020-2032. The National Planning Framework provides a target growth rate for County Galway between 50%-55% up to 2040, with a targeted growth of at least 30% up to 2026 for designated Key Towns. On that basis, the Key Town of Tuam has a population target of circa 2,630 persons up to 2028.

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.

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 country²¹.

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

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

4.8 **Soil**

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

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

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

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

4.8.1 Soil Types

Main soil types²² (Figure 4.6) surrounding the built-up areas of Tuam are peat soils (often indicative of areas that are the most sensitive to development due to ecological sensitivities and impeded drainage issues) partially within and to the south-west of the Plan area and brown earths (generally fertile soils, widely used for agriculture and associated with significant accumulation of clay) to the north, west and south of the Plan area.

Other soil types to the north of the Plan area, also shown on Figure 4.6, include alluvial soils (associated with alluvial clay, silt or sand river deposits)

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 Galway was completed in 2020, which identified 134 CGSs in County Galway, however; there are no designated geological sites within the Plan

area. The closest to the Plan area CGS is located c. 3 km to the north from the Plan area, Dunmore Esker (Site Code: GY058).

4.8.3 Landslides

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

There is one landslide event recorded c. 3 km to the south of the Plan area, associated with peatland areas²³ (shown on Figure 4.8). The GSI have identified²⁴ the Plan area as having mainly low levels of landslide susceptibility (mapped on Figure 4.8).

4.8.4 Potentially Contaminated Lands and Landfill Sites

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

4.8.5 Existing Problems

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

²² 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).

²³ Landslide events are recorded in the National Landslides Database available from GSI (<u>www.gsi.ie</u>).

²⁴ https://www.gsi.ie/en-ie/programmes-andprojects/geohazards/projects/Pages/Landslide-Susceptibility-Mapping.aspx



Figure 4.6 Soil types

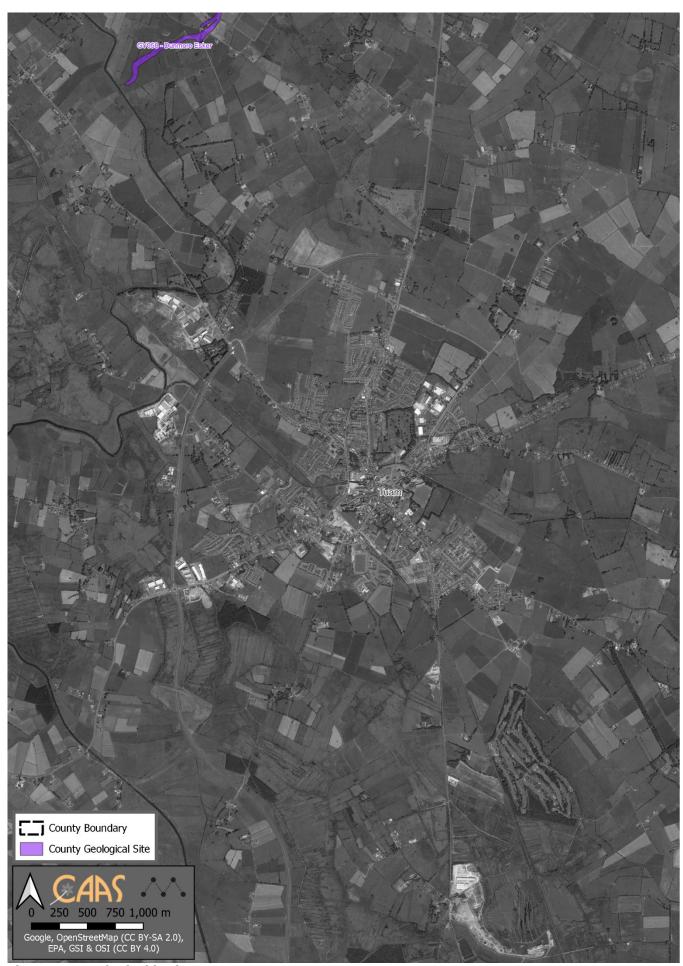


Figure 4.7 Geological heritage

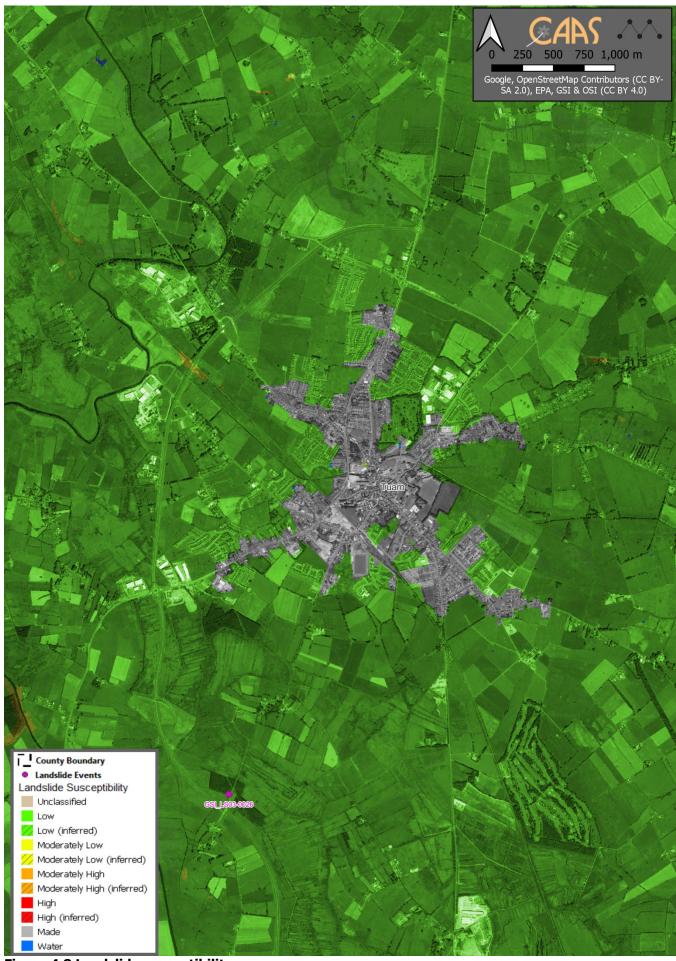


Figure 4.8 Landslide susceptibility

4.9 Water

4.9.1 The Water Framework Directive

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

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

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

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

4.9.2 Zone of Influence

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

4.9.3 Surface Water Drainage

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

The River Clare flows south westwards from the Ballygaddy Bridge to the Corrib. The River Nanny and the Grange River are both tributaries of the River Clare. The River Nanny flows through the town and joins the Clare River in the north-west of the Plan area.

4.9.4 Surface Water Status

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

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

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

The current WFD (2016-2021) status of the River Nanny (Tuam)²⁵ within and adjacent to the eastern parts of Plan area is *poor*. The status of the various of the River Clare surrounding the Plan area is *good* (Clare - Galway_040) to the west and north-west of the Plan area and *poor* (Clare - Galway_060) adjacent to the southern parts of the Plan area. Subject to exemptions provided for by Article 4 of the WFD, these water bodies will

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²⁵ As per EPA classification system (gis.epa.ie/EPAMaps)

need improvement in order to comply with the objectives of the WFD. Figure 4.9 illustrates the WFD surface water status within and surrounding the Plan area.

In addition to this, many water bodies are identified by the EPA as being at risk of not achieving their water quality objectives due to the damage being caused by significant pressures²⁶. Significant pressures, pressures which need to be addressed in order to improve water quality, have been identified for waterbodies that are 'At Risk' of not meeting their water quality objectives under the WFD. There are various types of pressures identified. Sections of the River Nanny intersecting the Plan area is identified with pressures related to hydromorphological pressures²⁷, which can include: modifications to the physical habitat conditions or the natural functioning of a waterbody which can impact on ecology, caused by dredging and straightening of rivers (chanellisation); land drainage; or hard infrastructure such as dams, weirs, culverts or other obstructions.

4.9.5 Groundwater Status

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

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

The WFD status (2016-2021) of all groundwater underlying the Plan area (mapped on Figure 4.9) is currently identified

²⁶ EPA (2019): Report on Water Quality in Ireland 2013-

as being of *good status*, meeting the objectives of the WFD.

4.9.6 Aquifer Vulnerability and Productivity

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

Aquifer vulnerability refers to the ease with which pollutants of various kinds can enter into groundwater. The aquifers underlying most the Plan area are mapped on Figure 4.10 and classified as a mix of vulnerabilities:

- High and Extreme vulnerability and Extreme (Rock at or near surface or karst), areas within and surrounding the River Nanny and within the central parts of the Plan area; and
- Moderate and low vulnerability, adjacent to and surrounding the central, north-western and southern parts 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 4.11. Aquifers in the vicinity of the Plan area are classified as being 'Regionally Important Aquifer – Karstified (conduit).'

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

²⁷ https://gis.epa.ie/EPAMaps/Water

Communities (Drinking Water) (No. 2) Regulations 2007 (S.I. No. 278/2007) and are identified on the RPAs for Drinking Water Ground or Surface Water Bodies (mapped on Figure 4.12).

findings of the SFRA have informed both the Plan and the SEA.

4.9.8 Flooding

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

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

Historical flooding is documented by the Office of Public Works (see Figure 4.13). The most significant source of flood risk within the Plan area is from fluvial (from rivers/streams, including from the River Nanny and its tributaries) however there are other sources of flooding present including those from groundwater, pluvial (from rainwater) and surface drainage systems.

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

4.9.9 Existing Problems

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

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

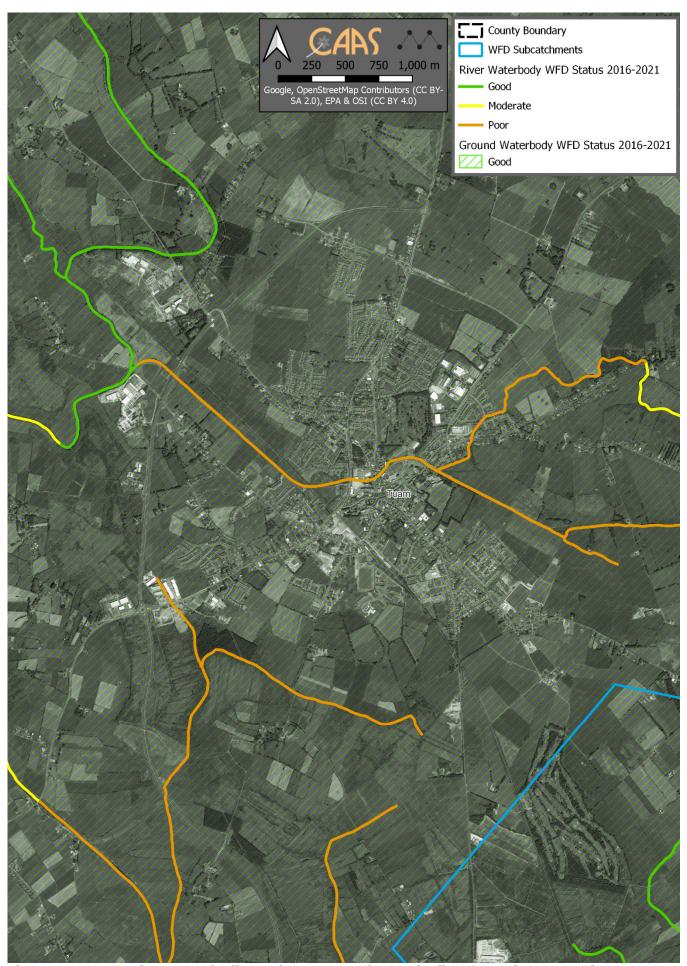


Figure 4.9 WFD Surface Waterbodies and WFD Ground Waterbodies Status (2016-2021)

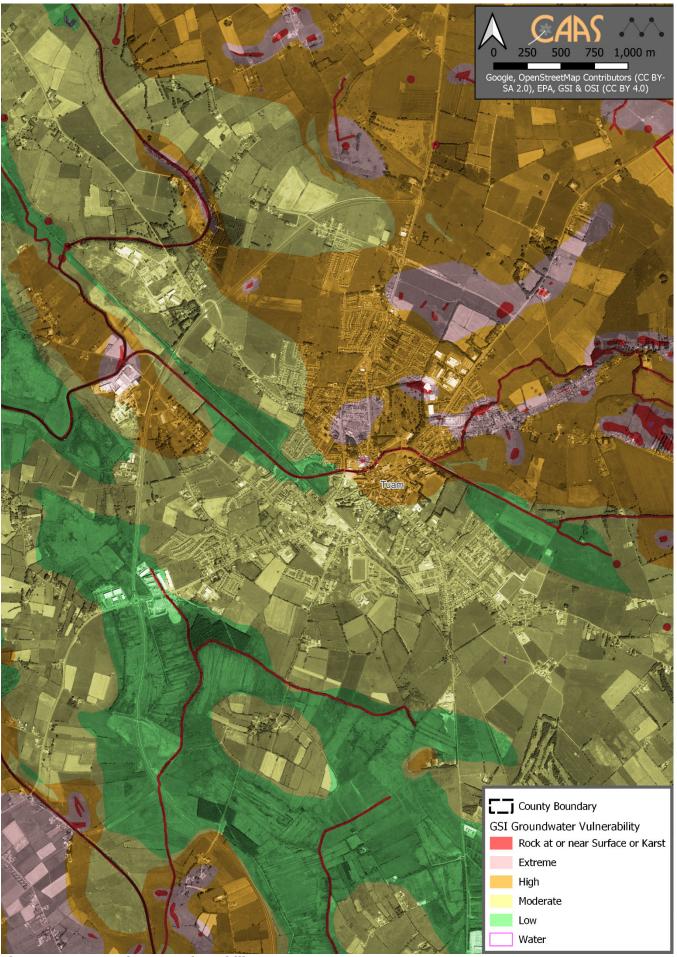


Figure 4.10 Groundwater Vulnerability

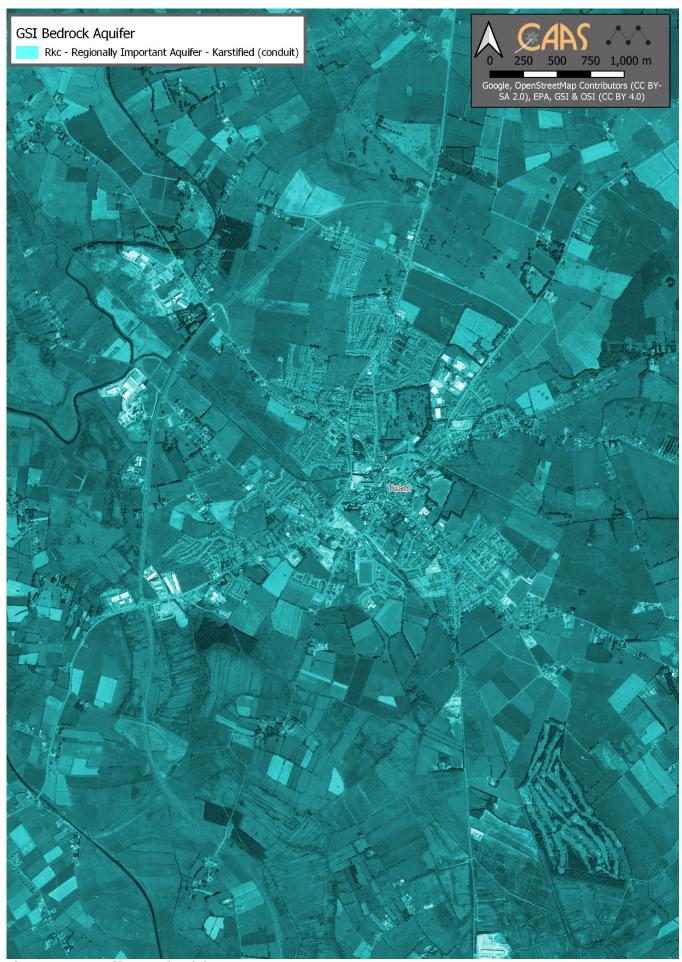


Figure 4.11 Aquifer Productivity



Figure 4.12 WFD RPA Drinking Water

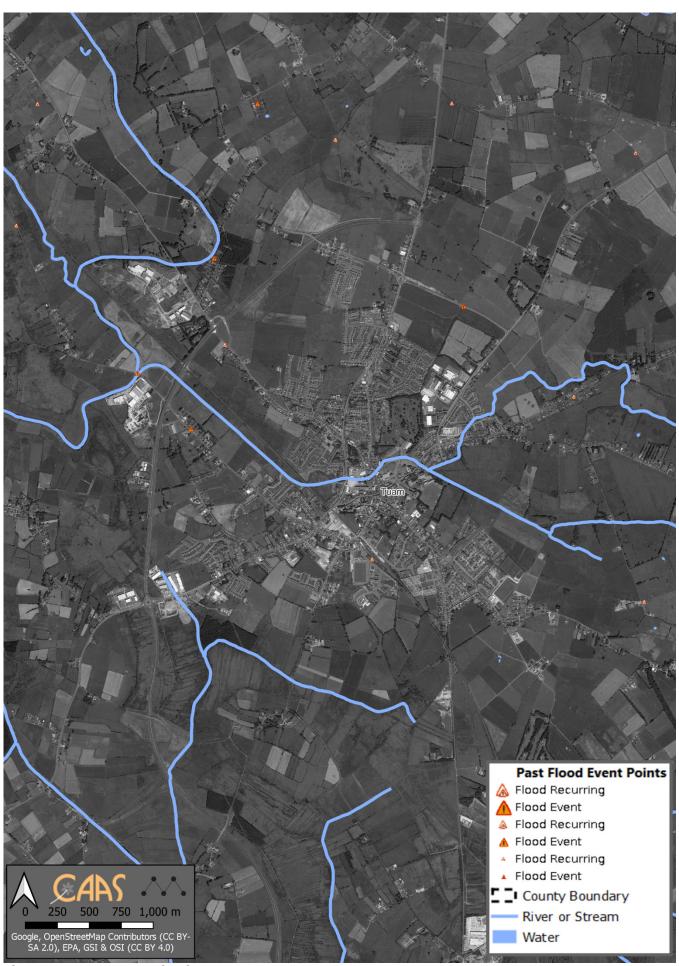


Figure 4.13 OPW Past Flood Events

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 residential developments, processes, commercial services developments, waste management processes and fluorinated gases equipment (such as refrigeration and fire protection systems).

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

Greenhouse gas emissions from the transport sector decreased by 15.7% or 1.92 Mt CO_2 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_2 eq.

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

Effort Sharing Regulation²⁸ Key findings identified as part of the report are that:

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

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²⁸ Regulation (EU) 2018/842 of on binding annual greenhouse gas emission reductions by Member States from 2021 to 2030 contributing to climate action to meet commitments under the Paris Agreement.

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

4.10.2 Climate Mitigation and Adaptation

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

The 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.

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

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

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

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

- Improve education, awareness-raising and capacity on climate change, adaptation (and mitigation), impact reduction and early warning across the Council, businesses, communities and individuals:
- Integrate climate change measures into policies, strategies and planning, as well as the identification of areas as risk to inform planning and decision making; and
- Strengthen resilience and adoptive capacity and develop and implement co-ordinated responses to climate risk where needed.

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 nonrenewable energy sources and achievement of legally binding renewable energy targets.

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

The overall target for Ireland in Directive 2009/28/EC was 16% share of renewable energy in Gross Final Consumption (GFC) by 2020. Under the Directive (2009/28/EC), Ireland was obliged to deliver 10% of transport energy by renewable sources by 2020²⁹. SEAI's 2021 publication "*Energy in Ireland 2021"* report includes the most recent assessment of Ireland's progress towards renewable energy targets up to 2020 and identifies that Ireland:

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

4.10.4 Energy Security

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

Indigenous production accounted for 32% of Ireland's energy requirements in 1990. mid-1990s However, since the 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

²⁹ Department of Communications, Climate Action and Environment (2017) National Renewable Energy Action Plan Fourth Progress Report submitted under Article 22 of Directive 2009/28/EC. Member States for a wide variety of pollutants. These pollutants are generated through fuel combustion, in space heating, traffic, electricity generation and industry and, in sufficient amounts, could affect the well-being of the areas inhabitants. The EU Directives include details regarding how ambient air quality should be monitored, assessed and managed.

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

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

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

- Air quality in Ireland is generally good, however, there are localised issues.
- Ireland met all of its EU legal requirements in 2021 but it failed to meet the new WHO-based guideline levels for Health in 2021.
- Air quality monitoring results in 2021 showed that fine particulate matter (PM_{2.5}) mainly from burning solid fuel, and nitrogen dioxide (NO₂) 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 (PM₅).

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.³⁰

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 Galway County Council (Noise Action Plan 2019-2023). The purpose of the Noise Action Plan is to avoid, prevent and reduce, on a prioritised basis the harmful effects, including annoyance due to the long-term exposure 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_{\times} emissions. Of these, NO_{2} 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 Section 4.12) natural resources of economic value, such as water and air (see Sections 4.9 and 4.10).

4.11.1 Public Assets and Infrastructure

Public assets and infrastructure that have the potential to be impacted upon by the Plan, if unmitigated, include: the town of Tuam; 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.

Tuam is served by the 38kV substation Tuam North and by a natural gas supply transported to the town via Beagh More Station on the Corrib Natural Gas Transmission pipe line³¹.

4.11.2Land

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.

³⁰ For more detail on current daily air quality data for the Plan refer to: https://gis.epa.ie/EPAMaps/.

³¹ https://www.gasnetworks.ie/corporate/company/ournetwork/projects/current-and-planned/gaswest/

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.

4.11.5 Peatlands

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

4.11.6Transport

Tuam is located approximately 33km north of Galway City. The Town is strategically located on the M17/M18 Motorway network, which provides a direct connection to Ireland West Airport Knock, Shannon Airport and Limerick, and a connection to the M6 via the M17 links the Town to Dublin. The geographical location of Tuam makes it accessible to most major towns and tourist attractions in Connaught.³²

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

4.11.7 Minerals and Aggregates

Minerals such as iron and copper and aggregates such as sand and gravel can occur throughout the country. Minerals and aggregates are essential to manufacturing and construction.

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

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

4.11.8 Water Services

4.11.8.1 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 Irish Water and the enforcement activities carried out by the EPA, this report identifies urban areas with the most important environmental issues that must be addressed.

From January 2014, Irish Water became responsible for all public water services, involving the supply of drinking water and the collection, treatment and disposal of waste water. Irish Water is also responsible for the treatment and disposal of the sludge that is generated from both its water and waste water treatment plants. The Council is an

³² Tuam LAP 2023-2029

agent of Irish Water for operations and remains the designated Water Authority for the assessment and approval of on-site treatment systems and is wastewater responsible for surface water drainage in the town.

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

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

4.11.8.2 Wastewater Infrastructure

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

Tuam WWTP (Reg. No. D0031-01) has a design capacity of 24,834 Population Equivalent (PE), with current (2019) load of 10,909 (PE) and headroom of 13,925 (PE)³⁴. As indicated by Irish Water, there is spare capacity available at this WWTP.35

33 https://www.epa.ie/publications/compliance-enforcement/waste-water/priority-areas-list-current.php 34 Galway CDP 2022-2028, SEA ER: Irish Water for Galway County Council (April 2020), Wastewater Constraints in County Galway.

35 Irish Water: Settlements with Waste Water Discharge Authorisations - Wastewater Treatment Capacity Register. The register provides an indication of available wastewater treatment capacity based on loads received in 2021 and available treatment plan capacity now or by completion of a project by 2024 (where relevant). Available at: https://www.water.ie/connections/developer-

services/capacity-registers/wastewater-treatmentcapacity-register/galway/ (Published in June 2022). The WWTP is currently not compliant with the Emission Discharge Values (ELVs).³⁶

4.11.8.3 Water Supply

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

Tuam is within the Lough Corrib (Galway City, Tuam and Loughrea) Water Resource Zone (WRZ)³⁷, with water being abstracted from Lough Corrib at Luimnagh. The Irish Water 10-Year Water Supply Capacity Register (March 2022) notes that there is capacity available at this WRZ, but level of service (LoS) improvement is required.38

Tuam receives its water supply directly from the Tuam Regional Water Supply Scheme (RWSS). A project to rationalise two water treatment plants in Loughrea into the Tuam RWSS was substantially completed in 2021. Investment in the RWSS Extension to Loughrea will provide a safe and secure water supply to over 6,000 local residents and businesses.39

The Galway County Development Plan 2022-2028 contains a list of the public water supply schemes which are included and approved in the Proposed Capital Investment Plan 2020-2024 for County Galway (including Tuam). These projects entail improvements/upgrading works and are envisaged to be completed

³⁶ EPA Site Visit Report (06/09/2022): While the emissions from the WWTP had been compliant for a period including the start of 2022, there had been several breaches of the licence ELVs for ammonia and orthophosphate. Compliance monitoring results indicate the ammonia issue at the WWTP is improving, though still

exceeding the ELV and there is an on-going issue with orthophosphate. Source:

http://epawebapp.epa.ie/licences/lic_eDMS/090151b2808 4d77b.pdf

³⁷ A WRZ is an independent water supply system serving a region, city, town or village and is governed by topography or the extent of the water distribution network in an area. A WRZ may include multiple Water Treatment Plants and/ or sources.

³⁸Capacity Available to meet targeted population growth to 2031 although an improvement to the Level of service (LoS) will be required. This may take the form of leakage reduction and/or capital investment to maintain/improve levels of service as the demand increases. Proposed solutions will be developed & prioritised through the National Water Resources Plan and investment planning process.Source: https://www.water.ie/connections/develop er-services/capacity-registers/water-supply-capacityregister/galway/(Published in March 2022).
³⁹ Tuam LAP 2023-2029

during the lifetime of the Galway County Development Plan 2022-2028.40

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

4.11.8.4 Surface Water Drainage

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

4.11.9 Waste Management

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

4.11.10 Existing Problems

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

The provisions of infrastructure and supporting services for development, particularly water and wastewater services, is critical (compliance issues with respect to the wastewater treatment plant have been identified above).

4.12 Cultural Heritage

4.12.1 Archaeological Heritage

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

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

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

The term 'monument' includes all man-made structures of whatever form or date except buildings habitually used for ecclesiastical purposes. All monuments in existence before 1700 A.D. are automatically considered to be historic monuments within the meaning of the Acts. Monuments of architectural and historical interest also come within the scope of the Acts. Monuments include: any artificial or partly artificial building, structure or erection or group of such buildings, structures or erections; any cave, stone or other natural product, whether or not forming part of the ground, that has been artificially carved, sculptured or worked upon or which (where it does not form part of the place where it is) appears to have been purposely put or arranged in position; any, or any part of any, prehistoric or ancient tomb, grave or burial deposit, or, ritual, industrial or habitation site; and any place comprising the remains or traces of any such building, structure or erection, any such cave, stone or natural product or any such tomb, grave, burial deposit or ritual, industrial or habitation site, situated on land or in the territorial waters of the State', but excludes 'any building or part of any building, that is habitually used for ecclesiastical purposes' (National Monuments

⁴⁰ Galway County Development Plan 2022-2028

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.

Tuam is classified as a monastic town and is a recorded monument. The town has developed a special historical archaeological interest especially with regard to its medieval importance and the fact that it was a strategically important ecclesiastical centre.

There is a Zone of Notification identified within Tuam, with various entries to the Sites and Monuments Record (SMR) and Record of Monuments and Places (RMP) designated within the historic town centre of the town.⁴¹

Figure 4.14 shows the spatial distribution of recorded monuments within and beyond the Plan area. Clusters of monuments are located within the centre of the Plan area and within the town's hinterland. There are various entries RMP within and around Tuam, including High Cross (National Monument in State Care), providing evidence of an early settlement.

Underwater Archaeology Unit was The 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 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 curtilage⁴² 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).

⁴¹ There are over 100 individual recorded archaeological monuments within the LAP boundary with approximately 29 of these located within the Zone of Notification for the historic town core.

⁴² Curtilage is normally taken to be the parcel of ground immediately associated with the Protected Structure, or in use for the purposes of the structure. Protection extends to the buildings and land lying within the curtilage. While the curtilage sometimes coincides with the present property boundary, it can originally have included lands, features or even buildings now in separate ownership, e.g. the lodge of a former country house, or the garden features located in land subsequently sold off. Such lands are described as being attendant grounds, and the protection extends to them just as if they were still within the curtilage of the Protected Structure.

Similar to the general spatial spread of archaeological heritage, clusters of architectural heritage are indicated within the town's centre, as shown on Figure 4.15.

Tuam is significant as an historic town on account of its ancient origins, with a number of archaeological sites within and around the town. The majority of buildings span the late 18th to late 19th centuries and share many characteristics. There are various Protected Structures within and surrounding the Plan area, including: castles; mills; churches; cemeteries; schools and buildings. Tuam retains many buildings of significance, such as: Glinsk Castle; Kilroe Mills; St. Mary's Catholic Cathedral of the Assumption; and Augustinian Abbey.

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

The National Inventory of Architectural Heritage (NIAH) is a State initiative under the administration of the Department of Housing, Local Government and Heritage and was established on a statutory basis under the provisions of the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999. The purpose of the NIAH is to identify, record, and evaluate the post-1700 architectural heritage of Ireland, uniformly and consistently as an aid in the protection and conservation of the built heritage. NIAH surveys provide the basis for the recommendations of the Minister of Culture, Heritage and the Gaeltacht to the local authorities for the inclusion of particular structures in their Record of Protected Structures. The NIAH includes historic gardens and designed landscapes. Figure 4.15 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.

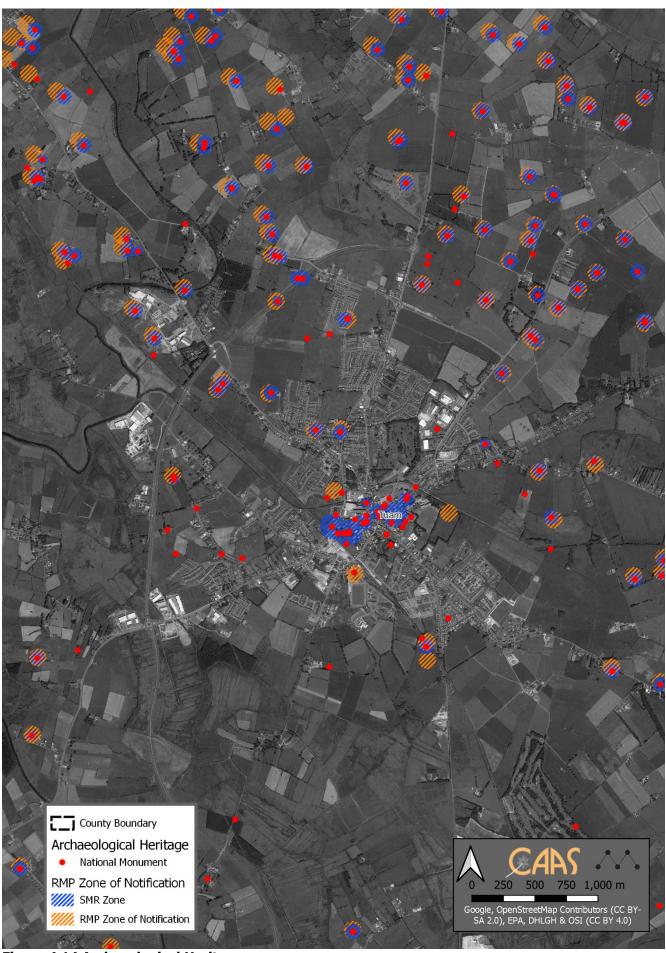


Figure 4.14 Archaeological Heritage

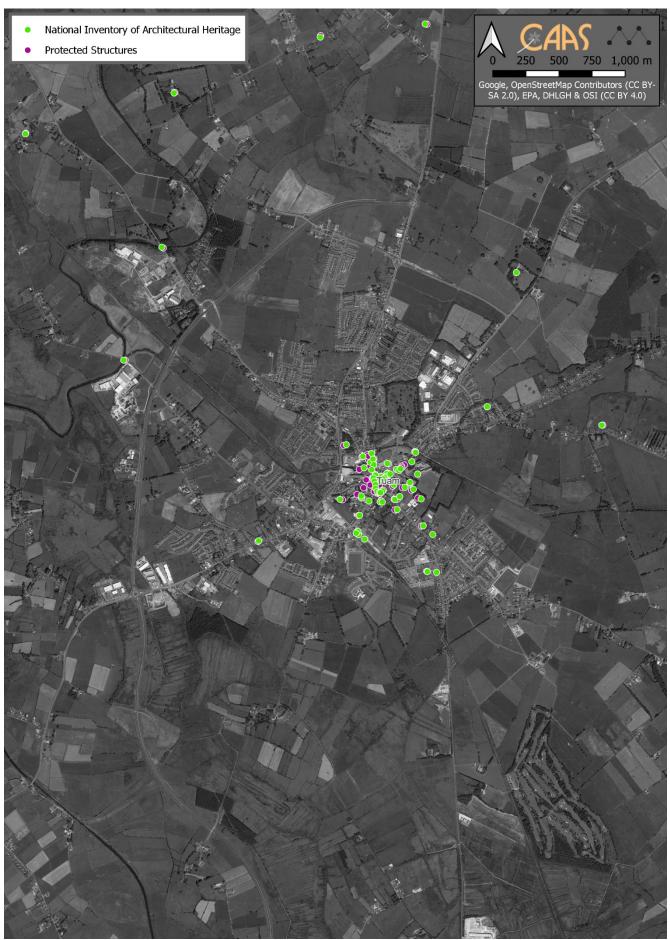


Figure 4.15 Architectural Heritage

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.

It is recognised that Tuam is an important market town, having a large agricultural hinterland. The River Nanny flows through centre of the town from west to east. The amenities of the town consist of the built environment including ecclesiastical buildings, cathedrals and historical ruins, the riverside character, the Palace Grounds Town Park, the sports arenas, parklands and the rich agricultural environs.

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 Galway County Development Plan 2022-2028 and associated County Galway Landscape Character Assessment (LCA) 2022 subdivide County Galway into three landscape regions and the coast, which are further broken down into ten separate landscape types. Tuam falls within the Urban Environs Landscape Type, adjacent to the North Galway Complex Landscape Character Type. Relevant landscape designations within the Plan area are mapped on Figure 4.16.

A landscape's capacity to absorb new development, without exhibiting a significant alteration of character or change of appearance is referred to as it's 'sensitivity'. The Galway County Development Plan 2022-2028 and associated LCA 2022 outlined four separate sensitivity classes for County Galway (low, high, special and iconic). According to this classification Tuam falls under "Class 1 – low: unlikely to be adversely affected by change", as shown on Figure 4.17.

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.

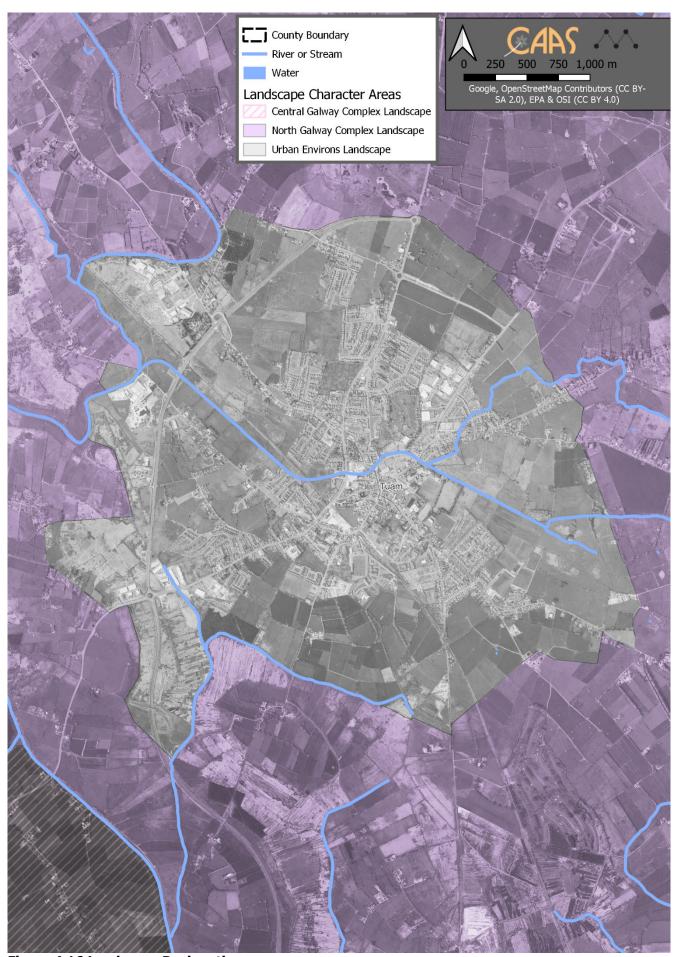


Figure 4.16 Landscape Designations

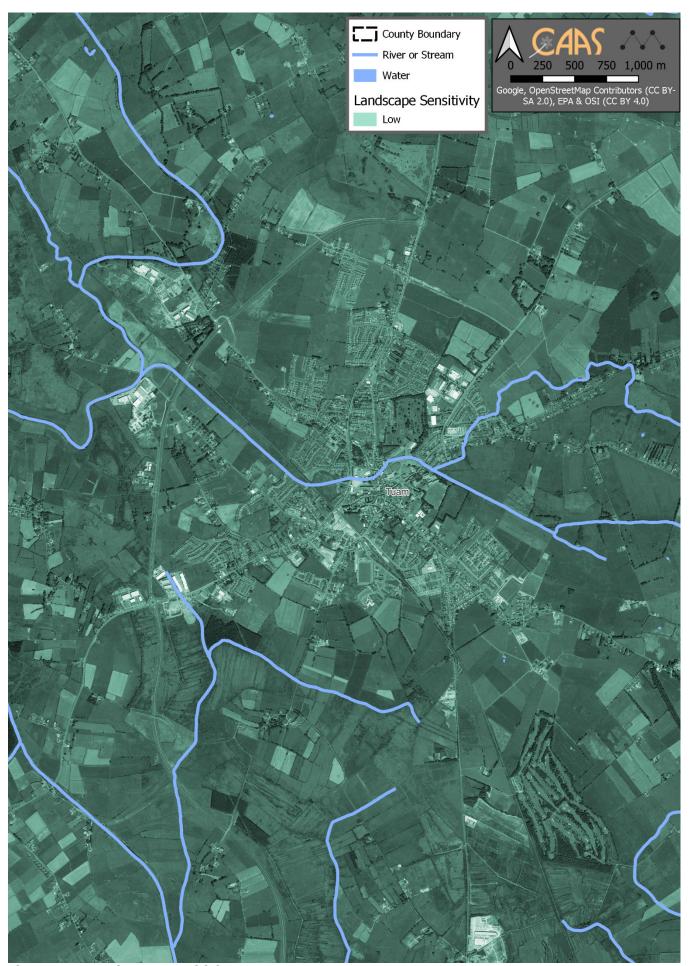


Figure 4.17 Landscape Sensitivity

Section 5 Strategic Environmental Objectives

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

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

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

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

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

Given the position of the Local Area Plan in the land use planning hierarchy beneath the Galway 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 5.1 Strategic Environmental Objectives (SEOs), Indicators and Targets

Environmental	SEO	Guiding	al Objectives (SEOs), Indicators and Ta Strategic Environmental Objectives	Indicators	Targets
Component	Code	Principle	Strategic Environmental Objectives	indicators	laigets
Biodiversity, Flora and Fauna	BFF	No net contribution to biodiversity losses or deterioration	 To preserve, protect, maintain and, where appropriate, enhance the terrestrial, aquatic and soil biodiversity, particularly EU designated sites and protected species Ensure no adverse effects on the integrity of any European site, with regard to its qualifying interests, associated conservation status, structure and function 	Condition of European sites	 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 Implement and review, as relevant, the Galway County Heritage and Biodiversity Plan 2017-2022
			 Safeguard national, regional and local designated sites and supporting features which function as stepping stones for migration, dispersal and genetic exchange of wild species Enhance biodiversity in line with the National Biodiversity Strategy and its targets To protect, maintain and conserve the County's natural capital 	 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 	 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 Implement and review, as relevant, County Galway Heritage and Biodiversity Plan 2017-2022
				SEAs and AAs as relevant for new Council policies, plans, programmes etc. Status of water quality in the County's	 Screen for and undertake SEA and AA as relevant for new Council policies, plans, programmes etc. Included under Water below
				water bodies • Compliance of planning permissions with Plan measures providing for the protection of Biodiversity and flora and fauna — see County Development Plan Chapter 10 "Natural Heritage, Biodiversity and Green Infrastructure"	• For planning permission to be only granted when applications demonstrate that they comply with all Plan measures providing for the protection of biodiversity and flora and fauna – see County Development Plan Chapter 10 "Natural Heritage, Biodiversity and Green Infrastructure"
Population and Human Health	PHH	Improve quality of life for all ages and abilities based on high- quality, serviced, well connected and	Promote economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management Ensure that existing population and planned growth is matched with the required public infrastructure and the required services Safeguard the County's citizens from	Implementation of Plan measures relating to the promotion of economic growth as provided for by County Development Plan Chapter 5 "Economic, Enterprise and Retail"	 For review of progress on implementing Plan objectives to demonstrate successful implementation of measures relating to the promotion of economic growth as provided for by County Development Plan Chapter 5 "Economic, Enterprise and Retail" By 2020 all citizens will have access to speeds of 30Mbps, and that 50% of citizens will be subscribing to speeds of 100Mbps (Also relevant to Material Assets)
		sustainable residential, working, educational and recreational environments	environment-related pressures and risks to health and well-being	Number of spatial concentrations of health problems arising from environmental factors resulting from development permitted under the Plan Proportion of people reporting regular cycling / walking to school and work above previous CSO figures	 No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan Increase in the proportion of people reporting regular cycling / walking to school and work above previous CSO figures
				Number of spatial plans that include specific green infrastructure mapping	Require all local level land use plans to include specific green infrastructure mapping

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Environmental	SEO	Guiding	Strategic Environmental Objectives	Indicators	Targets	
Component	Code	Principle				
sustainal		long-term sustainable management	long-term sustainable management	 Protect soils against pollution, and prevent degradation of the soil resource Promote the sustainable use of infill and brownfield sites over the use of greenfield within the County Safeguard areas of prime agricultural land and designated geological sites 	 Proportion of population growth occurring on infill and brownfield lands compared to greenfield (also relevant to Material Assets) 	 Maintain built surface cover nationally to below the EU average of 4% as per the NPF 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 To map brownfield and infill land parcels across the County
				 Instances where contaminated material generated from brownfield and infill must be disposed of 	Dispose of contaminated material in compliance with EPA guidance and waste management requirements	
				 Environmental assessments and AAs as relevant for applications for brownfield and infill development prior to planning permission 	 Screen for and undertake environmental assessments and AA as relevant for applications for brownfield and infill development prior to planning permission 	
Water	W	Protection, improvement and sustainable management	Ensure that the status of water bodies is protected, maintained and improved in line with the requirements of the Water Framework Directive Ensure water resources are sustainably	Status of water bodies as reported by the EPA Water Monitoring Programme for the WFD	 Not to cause deterioration in the status of any surface water or affect the ability of any surface water to achieve 'good status' Implementation of the objectives of the River Basin Management Plan 	
		of the water resource	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 Avoid inappropriate zoning and development in areas at risk of flooding and areas that are vulnerable to current and future erosion, particularly coastal areas Integrate sustainable water management solutions (such as SuDS, porous surfacing and green roofs) into development proposals	Number of incompatible developments permitted within flood risk areas	Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk	
Material Assets	MA	Sustainable and efficient use of natural resources	Optimise existing infrastructure and provide new infrastructure to match population distribution proposals in the County - this includes transport infrastructure 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 Promote the circular economy, reduce waste, and increase energy efficiencies Ensure there is adequate sewerage and drainage infrastructure in place to support new	 Programmed delivery of Irish Water infrastructure for all key growth towns in line with Irish Water Investment Plan and prioritisation programme to ensure sustainable growth can be accommodated Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the Plan 	 All new developments granted permission to be connected to and adequately and appropriately served by waste water treatment over the lifetime of the Plan 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 Facilitate, as appropriate, Irish Water in developing water and wastewater infrastructure See also targets relating to greenfield and brownfield development of land under Soil and broadband under Population and Human Health 	

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Farduan	CEA	Cuidin -		or the Tuam Local Area Plan 2023-2029	Taveste		
Environmental	SEO Code	Guiding	Strategic Environmental Objectives	Indicators	Targets		
Component	Code	Principle	development Reduce the energy demand from the transport sector and support moves to electrification of road and rail transport modes Encourage the transition to a zero-carbon economy by facilitating the development of a grid infrastructure to support renewables and international connectivity. Reduce the average energy consumption per capita including promoting energy efficient buildings, retrofitting, smart- buildings, cities and grids	Proportion of people reporting regular cycling / walking to school and work above previous CSO figures	Increase in the proportion of people reporting regular cycling / walking to school and work above previous CSO figures		
Air	A	Support clean air policies that reduce the impact of air pollution on the environment and public health	 To avoid, prevent or reduce harmful effects on human health and the environment as a whole resulting from emissions to air from all sectors with particular reference to emissions from transport, residential heating, industry and agriculture Maintain and promote continuing improvement in air quality through the reduction of emissions and promotion of renewable energy and energy efficiency Promote continuing improvement in air quality 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 Meet Air Quality Directive standards for the protection of human health — Air Quality Directive Significantly decrease noise pollution by 2020 and move closer to WHO recommended levels 	Proportion of journeys made by private fossil fuel-based car compared to previous National Travel Survey levels NO _x , SO _x , PM10 and PM2.5 as part of Ambient Air Quality Monitoring	 Decrease in proportion of journeys made by private fossil fuel-based car compared to previous National Travel Survey levels Improvement in Air Quality trends, particularly in relation to transport related emissions of NO_x and particulate matter 		
Climatic Factors ⁴³	C	Achieving transition to a competitive, low carbon, climate-resilient economy that is cognisant of environmental impacts	 To minimise emissions of greenhouse gasses Integrate sustainable design solutions into the County's infrastructure (e.g. energy efficient buildings; green infrastructure) Contribute towards the reduction of greenhouse gas emissions in line with national targets Promote development resilient to the effects of climate change Promote the use of renewable energy, energy efficient development and increased use of public transport 	 Implementation of Plan measures relating to climate reduction targets A competitive, low-carbon, climate-resilient and environmentally sustainable economy Share of renewable energy in transport 	 For review of progress on implementing Plan objectives to demonstrate successful implementation of measures relating to climate reduction targets Contribute towards transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050 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 		

⁴³ Please also refer to relevant legislation and requirements under Section 4.10, Section 8.5 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 Tuam Local Area Plan 2023-2029

Environmental	SEO	Guiding	Strategic Environmental Objectives	Indicators	Targets
Component	Code	Principle			
				Carbon dioxide (CO ₂) emissions across the electricity generation, built environment and transport sectors	 Contribute towards the target of aggregate reduction in carbon dioxide (CO₂) emissions of at least 80% (compared to 1990 levels) by 2050 across the electricity generation, built environment and transport sectors
				 Energy consumption, the uptake of renewable options and solid fuels for residential heating 	 To promote reduced energy consumption and support the uptake of renewable options and a move away from solid fuels for residential heating
				 Proportion of journeys made by private fossil fuel-based car compared to previous levels 	 Decrease in the proportion of journeys made by residents of the County using private fossil fuel-based car compared to previous levels
				 Proportion of people reporting regular cycling / walking to school and work above previous CSO figures 	 Increase in the proportion of people reporting regular cycling / walking to school and work above previous CSO figures
Cultural Heritage	СН	Safeguard cultural heritage features and their settings through responsible	Protect places, features, buildings and landscapes of cultural, archaeological or architectural heritage	Percentage of entries to the Record of Monuments and Places, and the context these entries within the surrounding landscape where relevant, protected from adverse effects resulting from development which is granted permission under the Plan	 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
		design and positioning of development		 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 	 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
Landscape	L	Protect and enhance the landscape character	To implement the Plan's framework for identification, assessment, protection, management and planning of landscapes having regard to the European Landscape Convention	 Number of developments permitted that result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in Land Use Plans, resulting from development which is granted permission under the Plan 	No developments permitted which result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in Land Use Plans, resulting from development which is granted permission under the Plan

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Section 6 Description of Alternatives

6.1 Introduction

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

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

6.2 Limitations in Available Alternatives

The Plan is required to be prepared by the existing, already in force, Galway County Development Plan 2022-2028 and the Planning and Development Act 2000 (as amended), which specifies various types of objectives that must be provided for by the Plan.

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

6.3 Type 1: Alternatives Already Considered

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

6.4 Type 2: Land Use Zoning Alternatives

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

Type 2 (i): "More Consolidated, More Compact"

- Tuam to reach population allocation, resulting in balanced orderly development and implementation of the core strategy as contained in Chapter 2 of the Galway County Development Plan 2022-2028.
- This alternative involves preparing the Plan using a Serviced/Serviceable Land and Infrastructure Assessment approach. Methodologies for this approach are set out in higher level documents, including the National Planning Framework and the 2013 Local Area Plan Guidelines for Planning Authorities.
- The infrastructure required to be in place to achieve the growth targets is already in place or planned.
- Residential Development to take place on R1 and Residential Infill lands over the lifetime of the Plan, with 30% expected on Town Centre lands.
- Community development facilities to be developed in tandem with economic and residential growth.
- Town Centre developments would be developed in a planned and coordinated manner focused within the town centre.
- Industry would occur in the periphery close to existing infrastructure.
- Opportunity sites identified with clear design and proposed uses identified.
- Open Space and Recreational Lands would be preserved.

Type 2 (ii): "Less Consolidated, Less Compact"

- Tuam to reach population allocation, resulting in balanced orderly development and implementation of the core strategy as contained in the Galway County Development Plan 2022-2024.
- This alternative involves preparing the Plan while not using the Serviced Land and Infrastructure Assessment approach.
- Additional infrastructure would be required to accommodate sporadic development, more than would be required for Alternative 1 'More Consolidated Development' and some development may have to be serviced by private waste water treatment systems which would have to be properly maintained.
- Residential Development to take place on R1, Residential Infill, R2 and certain peripheral, outer fringe lands (beyond the existing LAP boundary) over the lifetime of the Plan, with 30% less likely to be achieved on Town Centre lands (in comparison with Type 2 (i)).
- Industry would occur at locations including those close to residential development.
- Creation of commercial/social centres throughout the Plan area and associated dispersal of Town Centre, commercial development and local services.
- Town centre development would be sporadic and uncoordinated around the Town centre zonings.
- Opportunity sites are identified but no clear guidance on the design parameters or uses identified.

6.5 Type 3: Local Transport Plan Alternatives

Type 3 (i) Low Carbon Corridors and Connections

- A. Support the use of low carbon corridors and connections within the Plan boundary.
- B. Do not explicitly support the use of low carbon corridors and connections within the Plan boundary.

Type 3 (ii) How to provide cycling and walking capacity

- A. Provide new cycling and walking infrastructure with all additional environmental mitigation left to be defined until project level.
- B. Provide new cycling and walking 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 3 (iii) How to provide multi-model hubs

- A. Provide new multi-model hubs at optimum locations as identified by the Local Transport Plan.
- B. Provide new multi-model hubs at optimum locations as identified by the Local Transport Plan, 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 3 (iv) Roadspace Capacity

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

Evaluation of Alternatives Section 7

7.1 Introduction

This section provides a comparative evaluation of the likely significant environmental effects⁴⁴ 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 45

	able 7:1 Strategic Environmental Objectives							
Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives					
Biodiversity, Flora and Fauna	BFF	No net contribution to biodiversity losses or deterioration	 To preserve, protect, maintain and, where appropriate, enhance the terrestrial, aquatic and soil biodiversity, particularly EU designated sites and protected species Ensure no adverse effects on the integrity of any European site, with regard to its qualifying interests, associated conservation status, structure and function Safeguard national, regional and local designated sites and supporting features which function as stepping stones for migration, dispersal and genetic exchange of wild species Enhance biodiversity in line with the National Biodiversity Strategy and its targets To protect, maintain and conserve the County's natural capital 					

⁴⁴ These effects include secondary, cumulative (see also Section 8.2), synergistic, short, medium and long-term permanent and temporary, positive and negative effects.
⁴⁵ See also Section 5

Environmental	SEO Code	Guiding	Strategic Environmental Objectives
Component Population	PHH	Principle Improve	Promote economic growth to encourage retention of working age population
and Human Health	s	quality of life for all ages and abilities based on high-quality, serviced, well connected and sustainable residential, working, educational and recreational environments Ensure the	 and funding of sustainable development and environmental protection and management Ensure that existing population and planned growth is matched with the required public infrastructure and the required services Safeguard the County's citizens from environment-related pressures and risks to health and well-being
Land)		long-term sustainable management of land	 Promote the sustainable use of infill and brownfield sites over the use of greenfield within the County Safeguard areas of prime agricultural land and designated geological sites
Water	W	Protection, improvement and sustainable management of the water resource	 Ensure that the status of water bodies is protected, maintained and improved in line with the requirements of the Water Framework Directive Ensure water resources are sustainably managed to deliver proposed regional and County growth targets in the context of existing and projected water supply and wastewater capacity constraints ensuring the protection of receiving environments Avoid inappropriate zoning and development in areas at risk of flooding and areas that are vulnerable to current and future erosion, particularly coastal areas Integrate sustainable water management solutions (such as SuDS, porous surfacing and green roofs) into development proposals
Material Assets	МА	Sustainable and efficient use of natural resources	 Optimise existing infrastructure and provide new infrastructure to match population distribution proposals in the County - this includes transport infrastructure 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 Promote the circular economy, reduce waste, and increase energy efficiencies Ensure there is adequate sewerage and drainage infrastructure in place to support new development Reduce the energy demand from the transport sector and support moves to electrification of road and rail transport modes Encourage the transition to a zero-carbon economy by facilitating the development of a grid infrastructure to support renewables and international connectivity. Reduce the average energy consumption per capita including promoting energy efficient buildings, retrofitting, smart- buildings, cities and grids
Air	A	Support clean air policies that reduce the impact of air pollution on the environment and public health	 To avoid, prevent or reduce harmful effects on human health and the environment as a whole resulting from emissions to air from all sectors with particular reference to emissions from transport, residential heating, industry and agriculture Maintain and promote continuing improvement in air quality through the reduction of emissions and promotion of renewable energy and energy efficiency Promote continuing improvement in air quality 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 Meet Air Quality Directive standards for the protection of human health — Air Quality Directive Significantly decrease noise pollution by 2020 and move closer to WHO recommended levels

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives
Climatic Factors	С	Achieving transition to a competitive, low carbon, climate-resilient economy that is cognisant of environmental impacts	 To minimise emissions of greenhouse gasses Integrate sustainable design solutions into the County's infrastructure (e.g. energy efficient buildings; green infrastructure) Contribute towards the reduction of greenhouse gas emissions in line with national targets Promote development resilient to the effects of climate change Promote the use of renewable energy, energy efficient development and increased use of public transport
Cultural Heritage	СН	Safeguard cultural heritage features and their settings through responsible design and positioning of development	Protect places, features, buildings and landscapes of cultural, archaeological or architectural heritage
Landscape	L	Protect and enhance the landscape character	To implement the Plan's framework for identification, assessment, protection, management and planning of landscapes having regard to the European Landscape Convention

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

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

7.3 Detailed Assessment of Alternatives

7.3.1 Effects Common to all Alternatives

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

Table 7.3 Effects Common to All Alternatives

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

Environmental	Significant Positive Effect, likely to occur	Potentially Significant Adverse
Water	Contribution towards the protection of water by facilitating development of lands (including those within and adjacent to the Plan area) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the Plan area and beyond.	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.
Material Assets	Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands (including those within and adjacent to the Plan area) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere in the Plan area and beyond. Contribution towards limits in increases in energy demand from the transport sector by facilitating sustainable compact growth.	 Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity ensures the mitigation of potential conflicts). Failure to adequately treat surface water run-off that is discharged to water bodies (water services infrastructure and capacity ensures the mitigation of potential conflicts). Failure to comply with drinking water regulations and serve new development with adequate drinking water (water services infrastructure and capacity ensures the mitigation of potential conflicts). Increases in waste levels. Potential impacts upon public assets and infrastructure. Interactions between agricultural waste and soil, water, biodiversity and human health – including as a result of emissions of ammonia from agricultural activities (e.g. manure handling, storage and spreading) and the production of secondary inorganic particulate matter.
Air and Climatic Factors	Contribution towards climate mitigation and adaptation by facilitating compact development of lands (including those within and adjacent to the Plan area) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere in the Plan area and beyond.	 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.
Cultural Heritage	Contributes towards protection of cultural heritage elsewhere by facilitating development within the Plan area.	Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities.
Landscape	Contributes towards protection of wider landscape and landscape designations by facilitating development within the Plan area.	Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape.

7.3.2 Assessment of Type 2: Alternatives for Land Use Zoning

Alternative Type 2 (i): "More Consolidated, More Compact"

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

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

The development of the Town Centre would be more compact and sustainable under this scenario and would support the longer-term viability of the settlement. 30% of Residential units would be expected on Town Centre lands.

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

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

Alternative Type 2 (ii): "Less Consolidated, Less Compact"

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

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

The development of the Town Centre would be less compact and less sustainable under this scenario and would not optimally support the longer-term viability of the settlement. 30% of Residential units would be less likely to be achieved on Town Centre lands (in comparison with Type 2 (i).

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

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

Selected Alternative: Type 2 (i): "More Consolidated, More Compact"; however, certain Material Alterations that were adopted as part of the Plan (MA38 and MA49 – see Section 8.8) would introduce elements of Type 2 (ii): "Less Compact Development".

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

Table 7.4 Assessment of Type 2 Alternatives against Strategic Environmental Objectives

Alternative (selected alternative indicated in bold)	Likely to Improve status of SEOs			Potential Conflict with status of SEOs - likely to be mitigated		Probable Conflict with status of SEOs - unlikely to be mitigated	No Likely interaction with status of SEOs	
	to a Greater degree	to a Moderate degree	to a Lesser degree	to a Lesser degree	to a Moderate degree	to a Greater degree		
Type 2 (i): "More Consolidated, More Compact"46	BFF PHH S W MA A C	CH L		BFF PHH S W MA A C	CH L			
Type 2 (ii): "Less Compact Development"		CH L	BFF PHH S W MA A C		CH L	BFF PHH S W MA A C		

7.3.3 Assessment of Type 3: Alternatives for Transport

Type 3 (i) Low Carbon Corridors and Connections

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

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

Selected Alternative: Alternative A

Type 3 (ii) How to provide cycling and walking capacity

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

⁴⁶ However, certain Material Alterations that were adopted as part of the Plan (MA38 and MA49 – see Section 8.8) would introduce elements of Type 2 (ii): "Less Compact Development"

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

Selected Alternative: Alternative B

Type 3 (iii) How to provide multi-model hubs

The provision of new cycling hubs/parks at optimum locations as identified by the Local Transport Plan, with all additional environmental mitigation left to be defined until project level (Alternative A) would offer the least certainty for environmental protection and management and would be more likely to result in important individual projects (relating to sustainable mobility and emissions/energy objectives) not getting permission.

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

Selected Alternative: Alternative B

Type 3 (iv) Roadspace Capacity

These alternatives would have the potential to change behaviours and would influence the profile of users of the urban centre and mode share of transport. Reallocating roadspace within Tuam to walking, cycling and public transport to accompany / occur concurrently with the provision of any additional roadspace capacity that may arise in the future (Type 3 (ii) Alternative A) could take the form of removing traffic from streets, removing lanes of traffic, narrowing carriageways, traffic management measures, or removing on-street parking to provide cycle tracks or widened footpaths. This would benefit efforts to maximise sustainable mobility. This would also facilitate the enhancement of the public realm (including cultural heritage and its context) by contributing towards the replacement of motorised transport modes with more sustainable and non-motorised modes. Project level consideration of environmental impacts and mitigation, including those relating to construction, would need to take place in the context of more detail around proposals. To not accompany the development of additional roadspace capacity by a corresponding reallocation of roadspace within Tuam to walking, cycling and public transport (Type 3 (ii) Alternative B) would not benefit efforts to maximise sustainable mobility.

Selected Alternative: Alternative A

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

Table 7.5 Assessment of Type 3 Alternatives against Strategic Environmental Objectives

Alternative (selected alternative				Potential Conflict with status of SEOs - likely to be mitigated			Probable Conflict with status of SEOs - unlikely to	No Likely interaction with status of SEOs
indicated in bold)							be mitigated	SEUS
		+			-		-	0
	to a Greater degree	to a Moderate degree	to a Lesser degree	to a Lesser degree	to a Moderate degree	to a Greater degree		
Type 3 (i) Low C	arbon Corridors	and Connections	;					
A. Support	PHH A C MA			PHH A C		BFF S W L CH		
B. Do not explicitly support			PHH A C MA	BFF S W L CH		PHH A C MA		
Type 3 (ii) How	to provide cyclin	g and walking ca	apacity					
A. All additional environmental mitigation left to be defined until project level			BFF PHH S W MA A C CH L			BFF PHH S W MA A C CH L		
B. Environmental mitigation defined to a degree in relevant LAP provisions	BFF PHH S W MA A C CH L			BFF PHH S W MA A C CH L				
Type 3 (iii) How	to provide multi	-model hubs						
A. All additional environmental mitigation left to be defined until project level			BFF PHH S W MA A C CH L			BFF PHH S W MA A C CH L		
B. Environmental mitigation defined to a degree in relevant LAP provisions	BFF PHH S W MA A C CH L			BFF PHH S W MA A C CH L				
Type 3 (iv) Road	Ispace Capacity							
A. Reallocate	PHH A C MA CH			PHH A C MA CH		BFF S W L		
B. Do not reallocate						PHH A C MA CH		BFF S W

7.4 Selected Alternatives

Selected alternatives for the Plan from each of the three 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.

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.

Fable 8.1 Strategic Environmental Objectives ⁴⁷						
Environmental	SEO Code	Guiding	Strategic Environmental Objectives			
Component	BFF	Principle No not	• To processo protect maintain and where appropriate enhance the			
Biodiversity, Flora and Fauna	BFF	No net contribution to biodiversity losses or deterioration	 To preserve, protect, maintain and, where appropriate, enhance the terrestrial, aquatic and soil biodiversity, particularly EU designated sites and protected species Ensure no adverse effects on the integrity of any European site, with regard to its qualifying interests, associated conservation status, structure and function Safeguard national, regional and local designated sites and supporting features which function as stepping stones for migration, dispersal and genetic exchange of wild species Enhance biodiversity in line with the National Biodiversity Strategy and its targets To protect, maintain and conserve the County's natural capital 			
Population	PHH	Improve	Promote economic growth to encourage retention of working age population			
and Human Health		quality of life for all ages and abilities based on high- quality, serviced, well connected and sustainable residential, working, educational and recreational environments	 and funding of sustainable development and environmental protection and management Ensure that existing population and planned growth is matched with the required public infrastructure and the required services Safeguard the County's citizens from environment-related pressures and risks to health and well-being 			
Soil (and	S	Ensure the	Protect soils against pollution, and prevent degradation of the soil resource			
Land)	w	long-term sustainable management of land	 Promote the sustainable use of infill and brownfield sites over the use of greenfield within the County Safeguard areas of prime agricultural land and designated geological sites 			
Water		Protection, improvement and sustainable management of the water resource	 Ensure that the status of water bodies is protected, maintained and improved in line with the requirements of the Water Framework Directive Ensure water resources are sustainably managed to deliver proposed regional and County growth targets in the context of existing and projected water supply and wastewater capacity constraints ensuring the protection of receiving environments Avoid inappropriate zoning and development in areas at risk of flooding and areas that are vulnerable to current and future erosion, particularly coastal areas Integrate sustainable water management solutions (such as SuDS, porous surfacing and green roofs) into development proposals 			
Material Assets	МА	Sustainable and efficient use of natural resources	 Optimise existing infrastructure and provide new infrastructure to match population distribution proposals in the County - this includes transport infrastructure 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 Promote the circular economy, reduce waste, and increase energy efficiencies Ensure there is adequate sewerage and drainage infrastructure in place to support new development Reduce the energy demand from the transport sector and support moves to electrification of road and rail transport modes Encourage the transition to a zero-carbon economy by facilitating the development of a grid infrastructure to support renewables and international connectivity. Reduce the average energy consumption per capita including promoting energy efficient buildings, retrofitting, smart- buildings, cities and grids 			

⁴⁷ See also Section 5

Environmental	SEO	Guiding	Strategic Environmental Objectives
Component	Code	Principle	Caracago Innontan Cajacaras
Air	A	Support clean air policies that reduce the impact of air pollution on the environment and public health	 To avoid, prevent or reduce harmful effects on human health and the environment as a whole resulting from emissions to air from all sectors with particular reference to emissions from transport, residential heating, industry and agriculture Maintain and promote continuing improvement in air quality through the reduction of emissions and promotion of renewable energy and energy efficiency Promote continuing improvement in air quality 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 Meet Air Quality Directive standards for the protection of human health — Air Quality Directive Significantly decrease noise pollution by 2020 and move closer to WHO recommended levels
Climatic Factors	С	Achieving transition to a competitive, low carbon, climate-resilient economy that is cognisant of environmental impacts	 To minimise emissions of greenhouse gasses Integrate sustainable design solutions into the County's infrastructure (e.g. energy efficient buildings; green infrastructure) Contribute towards the reduction of greenhouse gas emissions in line with national targets Promote development resilient to the effects of climate change Promote the use of renewable energy, energy efficient development and increased use of public transport
Cultural Heritage	СН	Safeguard cultural heritage features and their settings through responsible design and positioning of development	Protect places, features, buildings and landscapes of cultural, archaeological or architectural heritage
Landscape	L	Protect and enhance the landscape character	To implement the Plan's framework for identification, assessment, protection, management and planning of landscapes having regard to the European Landscape Convention

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

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	
+	-	•	0

8.2 Cumulative Effects⁴⁸

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 2.5 (and associated Appendix I "Relationship with Legislation, Plans and Programmes"), Section 4 and Section 5. Plans and programmes from various sectors will interact with the Plan, including those relating to land use planning. These plans and programmes are subject to their own environmental assessment requirements as relevant. Examples include:

- Land use policy, plans and programmes (e.g. the National Planning Framework, the Western and Northern Regional Spatial and Economic Strategy, the Galway County Development Plan 2022-2028, adjoining County Development Plans and Local Area Plans)
- Galway Local Economic and Community Plan and the Local Economic and Community Plans of adjoining counties;
- Energy policy, plans and programmes (e.g. Grid25 and associated Implementation Programme, Ireland's National Renewable Energy Action Plan 2010, Strategy for Renewable Energy 2012-2020, Offshore Renewable Energy Development Plan, Draft National Energy and Climate Plan 2021-2030 and the Renewable Electricity Policy and Development Framework);
- Climate related policy, plans and programmes (e.g. the National Climate Policy Position and Climate Action 2014, Climate Action and Low Carbon Development Act 2015, as amended, Climate Action Plan 2023, National Mitigation Plan 2017, the National Adaptation Framework 2018 and the Galway Climate Change Adaptation Strategy 2019-2024);
- Water services, waste management, transport and energy infrastructure plans (e.g. Irish Water's Water Services Strategic Plan and associated Capital Investment Plan, Connacht-Ulster Regional Waste Management Plan and Transportation Policies and Strategies); and
- Environmental protection and management plans (e.g. River Basin Management Plans and Flood Risk Management Plans).

Potential cumulative/in combination effects include:

- Contributions towards reductions in travel related greenhouse gas and other emissions to air, reductions in consumption from non-renewables and associated achievement of legally binding targets (in combination with plans and programmes from all sectors, including energy, transport and land use planning) as a result of facilitating:
 - sustainable compact growth;

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⁴⁸ The EPA's guidance note 'Good Practice Guidance note on cumulative effects assessment in SEA' has been considered in the assessment.

- 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 housing, employment, agricultural and forestry – loadings and abstractions;
- Potential cumulative effects (habitat damage, enhancing ecological connectivity, contributing towards sustainable mobility) arising from linear developments, such as those relating to Green Infrastructure, including beyond the Plan boundary;
- Potential cumulative effects on flood risk by, for example, development of greenfield lands or obstruction of flood paths; and
- In combination with plans and programmes from all sectors potential adverse effects on all environmental components arising from all development in greenfield and brownfield areas (e.g. infrastructural, residential, economic, agricultural etc.). The type of these effects are consistent with those described on Table 8.3. These plans and programmes are required to comply with environmental legislation and undergo SEA and AA as relevant comply with environmental legislation while projects are subject to EIA and AA, as relevant.

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

A variety of the issues covered by the Plan provisions are regional and county issues which are considered: at Regional Assembly level, in the Western and Northern RSES and by planning authorities across the Region; and at County level, including through the Galway 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 Western and Northern region, would potentially conflict with a number of environmental components, across the wider County and wider Western and Northern 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

Galway 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 Galway 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	Effects include in-combination effects that are planned for through	tal Effects, in combination with the wider planning frameworgh the wider planning framework including the NPF and associated NDP, the Wan 2022-2028 and 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	
Biodiversity and Flora and Fauna	 Contribution towards protection of ecology (including designated sites, ecological connectivity, habitats) by facilitating development of lands (including those within and adjacent to the Plan area) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the Plan area and beyond. 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. 	Arising from both construction and operation of development and associated infrastructure: Loss of/damage to biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species, listed species, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna; Habitat loss, fragmentation and deterioration, including patch size and edge effects; and Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species such as birds (e.g. swifts) and bats.	Loss of an extent of non-protected habitats and species arising from the replacement of semi-natural land covers with artificial surfaces. Losses or damage to ecology (these would be in compliance with relevant legislation).	BFF

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

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

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

8.4 Appropriate Assessment and Strategic Flood Risk Assessment

Stage 2 Appropriate Assessment (AA) has been undertaken alongside the preparation of the Plan. The requirement for AA is provided under the EU Habitats Directive (1992/43/EEC). The AA assesses the effects of the Plan on European Sites designated for certain habitats and species. The conclusion of the AA is that the Plan will not affect the integrity of the Natura 2000 network⁴⁹.

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. In addition, land use zoning contained within the Plan has been informed by the SFRA process and associated delineation of flood risk zones.

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, Climate change and its associated challenges have been covered throughout the Galway County Development Plan as an embedded theme. In particular, Chapter 14 Climate Change, Energy and Renewable Resource details the nature and extent of climate change and how it impacts people's lives, society and the broader economy. In accordance with the County Development Plan, the LAP seeks to create and develop well-planned sustainable communities where sustainable modes of travel are encouraged to local facilities such as education, work and commercial activity.

The development of local renewable and low carbon energy sources will be encouraged in Tuam through retrofitting and as part of new development proposals in accordance with the Local Authority Renewable Energy Strategy (LARES) and proper planning and sustainable development. Incorporating Sustainable Urban Drainage Systems (SuDS) for surface water management will also be utilised where possible. In certain instances, innovative (SuDS) solutions can be used to enhance local biodiversity within streets and open spaces. The Tuam LAP is subject to a Strategic Flood Risk Assessment that has contributed towards the integration of flood risk management provisions into the Plan.

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.

(c) adequate compensatory measures in place.

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⁴⁹ 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/programme/project to proceed; and

Table 8.4 Presence of Interrelationships between Environmental Components

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

8.7 Detailed Evaluation

For an explanation of SEO codes e.g. BFF, PHH, S, W, etc. refer to Table 8.1 on page 68.

The following applies to each of the sub-sections 8.7.1, 8.7.2 and 8.7.3.

The Plan is situated in a hierarchy of documents setting out public policy setting out public policy for, among other things, land use planning, infrastructure, sustainable development, tourism, environmental protection and environmental management, such as the National Planning Framework, the National Development Plan, the National Mitigation Plan, the National Adaptation Framework, the Climate Action Plan, the Regional Spatial and Economic Strategy for the Western and Northern Region and the Galway County Development Plan 2022-2028 (for additional detail please refer to Section 2.5 "Relationship with other relevant Plans and Programmes" in this report).

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

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

8.7.1 Vision and Strategic Aims

	Likely to Improve	Potential Conflict with status of	Probable Conflict	No Likely interaction
	status of	SEOs - likely to be	with	with
	SEOs	mitigated	status of	status of
	SEOS	magacca	SEOs -	SEOs
			unlikely	3LOS
			f.,	
			to be	
			mitigated	
	+	-	-	0
The Vision is: "To promote Tuam as a thriving, vibrant market town, providing a focus for future residential, economic & social development sustainably, encouraging new	BFF PHH	BFF PHH S W MA		
development and capitalising on the town's unique historical identity and character, as well as its accessibility, thereby realising Tuam's potential as well as supporting the	S W MA A	A C CH L		
surrounding rural hinterland."	C CH L			
The Local Area Plan will continue its vital role as an economic driver in north County Galway. The town will fulfil its role as identified in the RSES to provide sustainable				
compact growth with access to good local services and critical infrastructure. This can be achieved through the following aims:				
Promote development of the Town Centre to enhance the vitality and viability of Tuam with a focus on providing for retail, commercial and residential development. Providence of the Town Centre to enhance the vitality and viability of Tuam with a focus on providing for retail, commercial and residential development.				
 Development will be focused within the town centre to act as the economic, social and cultural hub of the town. Support investment in regeneration and other town centre improvement works to maintain Tuam as an attractive place to work and visit 				
 Support investment in regeneration and other town centre improvement works to maintain Tuam as an attractive place to work and visit Ensure sustainable settlement patterns, including the provision of necessary planning framework to accommodate educational, community, leisure and recreational 				
facilities to satisfactorily complement the population increase.				
 Tuam is strategically located as a centre for growth in North Connaught, it has excellent connections to the motorway route from Limerick to Sligo as well as motorway 				
linkages to Galway and Dublin. It has the opportunity to develop as the focus for future development in North Connaught providing the infrastructure and services for				
its surrounding small towns/villages and rural lands.				
Promote future residential development in Tuam with sustainable, liveable and safe neighbourhoods supported by good quality services and infrastructure as				
appropriate, including social infrastructure with retail, community and amenity areas.				
Encourage the promotion of sustainable mobility, including walking and cycling, in accordance with the aspirations of the Local Transport Plan and support the				
continued provision of investment in public transport.				
Recognises the town's potential as an attractive place for people and locals to enjoy by promoting local amenities such as St. Joseph's Park, Tuam Stadium, local				
sporting facilities such as a rugby club, GAA club and football clubs and Leisure Centre.				
Promoting and facilitating the appropriate growth of the Town, while protecting the built, cultural and natural heritage of Tuam in accordance with applicable legislation.				
and policy. This also includes consideration of particular features of Tuam capitalising on the existing historic fabric of the town. Supporting development in Tuam in a				
sensitive manner which conserves and protects the historic core, recognising the towns cultural and historic built environment as a valuable asset.				

Commentary

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

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

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

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

The SEA process that is being undertaken alongside the preparation of the Plan has brought about various changes to the emerging Plan through an iterative process. Some of these measures are reproduced under Section 9 "Mitigation Measures" of this report. By integrating SEA recommendations into the Plan, Galway 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 Vision and Strategic Aims will contribute towards the sustainable development of the Plan area and the protection and management of the environment.

8.7.2 Land Use Zoning and Development Management Standards

	<u>Improve</u>	Potential Conflict with status of SEOs - likely to be	<u>Conflict</u>	No Likely interaction with
	SEOs	mitigated	status of	status of
			SEOs -	SEOs
			unlikely	
			to be mitigated	
	+	-	-	0
The Local Area Plan provides for land use zoning across the Plan area and guidance on relating to land use developments and activities, including development management	BFF PHH			
guidelines and standards relating to flood risk.	S W MA A C CH L	A C CH L		

Commentary

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

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

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

These 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.

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

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

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

Zoning has been applied in a way that primarily seeks to achieve sustainable and compact growth, taking into account the various requirements set out in the higher-level NPF, Western and Northern RSES and Galway County Development Plan 2022-2028.

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

8.7.3 Policy Objectives

	Likely to	Potential Conflict	Probable	No Likely
	Improve	with status of	Conflict	interaction
	status of	SEOs - likely to be	with	with
	SEOs	mitigated	status of	status of
	SEUS	mugated		
			SEOs -	SEOs
			unlikely	
			to be	
			mitigated	
	_		magacca	
	+	-	-	0
The Local Area Plan provides for various policy objectives, including:	BFF PHH	BFF PHH S W MA		
TKT 1 Consistency with Core Strategy	S W MA A	A C CH L		
TKT 2 Service Led Development	C CH L			
TKT 3 Environmental Assessment				
TKT 4 Proliferation of Individual Uses				
TKT 5 Residential Development Phasing				
TKT 6 Residential Infill Development				
TKT 7 Sequential Development				
TKT 8 Implementation and Monitoring				
TKT 9 Town Centre				
TKT 10 Town Centre Management				
TKT 11 Community Facilities				
TKT 12 Athletics Facilities				
TKT 13 Business and Enterprise				
TKT 14 Business and Technology				
TKT 15 Industrial				
TKT 16 Strategic Sites in Tuam				
TKT 17 Active Land Management in Tuam				
TKT 18 Open Space/ Recreation & Amenity				
TKT 19 Tourism Development				
TKT 20 Agriculture				
TKT 21 Public Utilities				
TKT 22 Water Supply, Wastewater and Combined Drainage Infrastructure TKT 23 Water Supply and Water Conservation				
TKT 24 Archaeological Heritage				
TKT 25 High Quality, Contextually Sensitive Design				
TKT 26 Social Inclusion and Universal Design and Access				
TKT 27 Architectural Heritage				
TKT 28 Tuam Regeneration Masterplan TKT 29 Architectural Conservation Area				
TKT 30 Burial Sites				
TKT 31 Social and Specialist Housing				
TKT 32 Housing for Older People and People with Special Needs				
TKT 33 Other Residential Development				
TKT 34 Traveller Accommodation				
TKT 35 Local Transport Plan				
TKT 36 Transport Infrastructure				
TKT 37 Noise				
TKT 38 Sustainable Transportation				
TKT 39 Pedestrian and Cycle Network				
TKT 40 Traffic and Transport Assessment (TTA) and Road Safety Audits				
TKT 41 Preservation of Routes, Road Upgrades and Infrastructure Provision				
TKT 42 Reservation of Access Points				
TKT 43 Road Junction Improvements				
TKT 44 Climate Change				

SEA Environmental Report for the Tuam Local Area Plan 2023-2029		
TKT 45 European Sites		
TKT 46 Constrained Land Use		
TKT 47 Flood Risk Management Guidelines		
TKT 48 Flood Risk Management and Assessment		
TKT 49 Principles of Flood Risk Management Guidelines		
TKT 50 Connections to the Public Sewer & Public Water Mains		
TKT 51 Surface Water Drainage and Sustainable Drainage Systems (SuDs)		
TKT 52 Protection of Waterbodies and Watercourses		
TKT 53 Flood Risk Assessment for Planning Applications and CFRAMS		
TKT 54 Flood Risk Assessment and Climate Change		
TKT 55 Flood Risk Assessment and Environmental Impact Assessment (EIA)		
TKT 56 Flood Vulnerable Zones		
TKT 57 Flood Risk Management		
TKT 58 Waste Prevention, Reduction & Recycling		
TKT 59 Broadband & Telecommunications		
TKT 60 Open Access Fibre Ducting		
TKT 61 Climate Change and Local Renewable Energy Sources		
TKT 62 Trees, Parkland/Woodland and Hedgerows		
TKT 63 Development Management Standards and Guidelines		
TKT 64 Opportunity Sites		

Commentary

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

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

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

The Policy Objectives 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.

Policy Objectives relating to town centre development and regeneration (including the Tuam Regeneration Masterplan) would contribute towards the vibrancy, diversity, vitality, attractiveness, safety, liveability and compact growth of Tuam. Demonstration of adherence with the provisions of the Masterplan would contribute towards achieving sustainable urban design, place-making and connectivity for the area.

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

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

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

- The Climate Action Plan;
- The County Galway Climate Adaptation Strategy 2019-2024;
- 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 Western and Northern Regional Spatial and Economic Strategy that has identified various Regional Policy Objectives relating to climate action, including:
 - o RPO 4.16 The NWRA shall co-ordinate the identification of potential renewable energy sites of scale in collaboration with Local Authorities and other stakeholders within 3 years of the adoption of the RSES. The identification of such sites (which may extend to include energy storage solutions) will be based on numerous site selection criteria including environmental matters, and potential grid connections.
 - RPO 4.17 To position the region to avail of the emerging global market in renewable energy by: Stimulating the development and deployment of the most advantageous renewable energy systems; Supporting research

and innovation; Encouraging skills development and transferability; Raising awareness and public understanding of renewable energy and encourage market opportunities for the renewable energy industry to promote the development and growth of renewable energy businesses; Encourage the development of the transmission and distribution grids to facilitate the development of renewable energy projects and the effective utilisation of the energy generated from renewable sources having regard to the future potential of the region over the lifetime of the Strategy and beyond.

- o RPO 4.18 Support the development of secure, reliable and safe supplies of renewable energy, to maximise their value, maintain the inward investment, support indigenous industry and create jobs.
- o RPO 4.20 Support and encourage the development of the bio-economy sector, and facilitate its development for energy production, heat, and storage distribution, in particular advocating Combined Heat and Power Units integrated into District Heating networks, in combination with Pyrogenic Carbon Capture and Storage (PyCCS) or Bio-Energy Carbon capture and storage (BECCS) all to be done in collaboration with EPA and other regulators.
- o RPO 4.21 Promote innovative new building design and retrofitting of existing buildings, both private properties, and publicly owned, to improve building energy efficiency, energy conservation and the use of renewable energy sources following National Regulations, and Policy.
- o RPO 5.1 The Assembly will support through CARO and Local Authorities the preparation and implementation of Local Climate Strategies which will, inter alia, address vulnerability to climate risks and provide prioritised actions in accordance with the quiding principles of the National Adaptation Framework.
- o PO 6.51 Promote values and policies that make it easy to commute between home, work and school across the region in a way that contributes to a healthy, attractive and climate-friendly region.

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

Bio-Energy

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

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

Geothermal Energy

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

Potential Negative Effects, if unmitigated:

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

Hydro-Energy

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

Potential Negative Effects, if unmitigated:

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

Solar Energy and Solar Thermal Energy

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

Potential Negative Effects, if unmitigated:

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

Waste to Energy

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

Potential Negative Effects, if unmitigated:

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

Wind Energy

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

Potential Negative Effects, if unmitigated:

· Potential impacts include those associated with construction and operation of the turbines and ancillary facilities and infrastructure (including roads and electrical infrastructure)

- · Potential human health impact: shadow flicker, noise, and impacts arising from bog bursts and landslides
- Potential impact upon designated and non-designated biodiversity and flora and fauna including birdlife
- Potential 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

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

The provisions in this Chapter of the Plan would contribute towards the planning framework for the future development of sustainable transport and movement within and beyond the Plan area (including relating to delivery of the infrastructure and services proposed in the Local Transport Plan), in combination with the implementation of other provisions from the Plan and other plans and programmes. Many of these provisions would primarily contribute towards maximising sustainable mobility and associated interactions with emissions to air (including noise and greenhouse gas emissions), energy usage, air quality and human health. The facilitation of journeys by car, in particular, would give rise to emissions to air. PRP 2 "Corridor & Route Selection Process" of the County Development Plan 2022-2028 would need to be complied with by new projects as relevant.

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

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

Further to these provisions there are various other provisions in the County Development Plan 2022-2028 with which new development under the Local Area Plan would have to comply with as relevant.

The focus of various Policy Objectives is the protection and management of the environment, such as those relating to environmental assessment, architectural heritage, European sites, flood risk management and appropriate and adequate infrastructure provision.

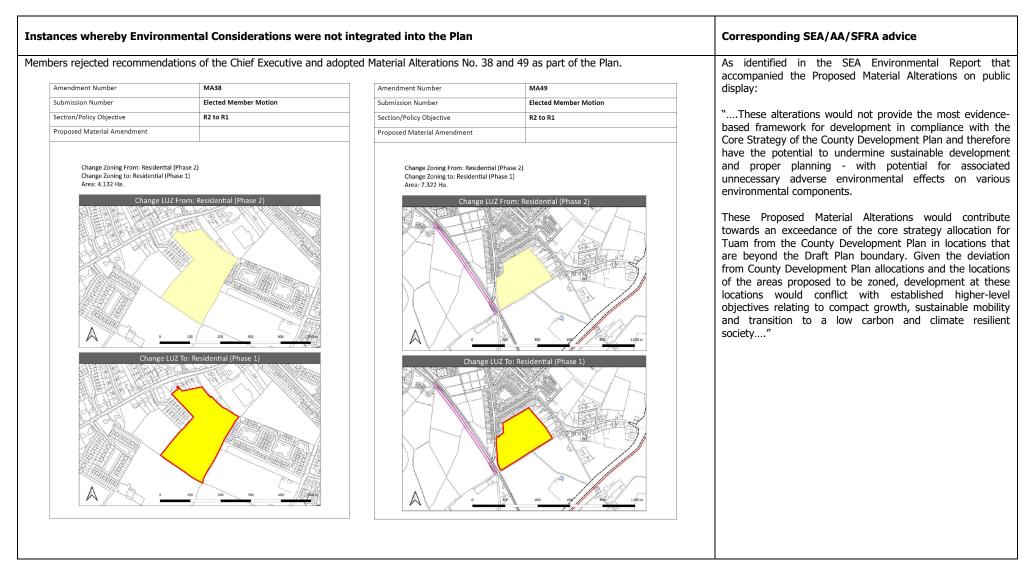
The Policy Objectives would contribute towards the sustainable development and the protection and management of the environment.

⁵⁰ PRP 2 Corridor and Route Selection Process. Policy objectives relating to new roads and other transport infrastructure projects that are not already provided for by existing plans/ programmes or are not already permitted, are subject to the undertaking of feasibility assessment, taking into account planning need, environmental sensitivities as identified in the SEA Environmental Report and the policy objectives of the Plan relating to sustainable mobility. Where feasibility is established, a Corridor and Route Selection Process will be undertaken where appropriate, for relevant new road infrastructure in two stages: Stage 1 – Route Corridor Identification, Evaluation and Selection.

8.8 Instances whereby Environmental Considerations were not integrated into the Plan

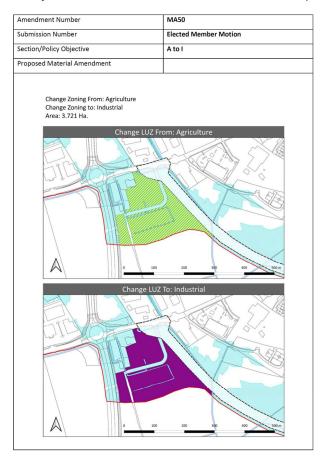
Table 8.5 describes instances whereby environmental considerations were not integrated into the Plan by the Members and the corresponding environmental advice that was provided at the time through the SEA/AA/SFRA processes.

Table 8.5 Instances whereby Environmental Considerations were not integrated into the Plan and corresponding SEA/AA/SFRA advice



Instances whereby Environmental Considerations were not integrated into the Plan

Members rejected recommendations of the Chief Executive and adopted Material Alteration No. 50 as part of the Plan.



Corresponding SEA/AA/SFRA advice

The SEA Environmental Report that accompanied the Proposed Material Alterations on public display addressed a number of Proposed Material Alterations, including Proposed Material Alteration No. 50, as follows:

"These alterations are related to the zoning of lands that include those at higher risk of flooding as identified by the SFRA. These proposals could result in an increase in flood risk — including to populations and human health and material assets — and associated adverse effects.

MA39, MA50, MA51, MA55 and MA56 propose zoning that would not be considered compatible to complying with the Flood Risk Management Ministerial Guidelines.

The current meaning of the proposed zonings would fail the Justification Test set out in the 2009 Guidelines as, inter alia, there are alternative lands available elsewhere, in areas of lower risk. Please also refer to the suggested further modifications under Section 9.7 of this report."

The Plan that was adopted includes the following clarification to the meaning of the Industrial Land Use Zoning Objective as one of a number "General Notes on Land Use Zoning Matrix" under Table 1.6.1 "Land Use Matrix" of the Plan:

- "12. Industrial Uses for Industrial Zoning where the matrix indicates "Permitted in Principle" and "Open to Consideration". This is applicable on the lands adjacent and including the existing commercial/industrial development between the River Clare and the N83; and lands to the south east of the N17/M17 and N83/Galway Road roundabout. This shall be limited in areas at elevated risk of flooding, as per the Flood Risk Management Guidelines, as follows:
 - In Flood Zone A, uses shall be limited to water compatible uses.
 - In Flood Zone B, uses shall be limited to less vulnerable and water compatible uses (as per the Flood Risk Management Guidelines);

These limitations shall take primacy over any related provision relating to the land use zoning matrix (see Land Use Zoning Map accompanying this plan)."

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 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 County Development Plan.

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

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

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

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

9.3 Consideration of Alternatives

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

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

9.4 Integration of environmental considerations into Zoning of the Plan

Environmental considerations, including those relating to ecology, cultural heritage, landscape and water, were integrated into the Local Area Plan's zoning through an interdisciplinary approach which was informed by the environmental considerations identified by the SEA, AA and SFRA processes.

Zoning has been applied in a way that primarily seeks to achieve sustainable and compact growth, taking into account the various requirements set out in the higher-level NPF, Western and Northern RSES and Galway County Development Plan 2022-2028.

Flood risk management and drainage provisions are already in force through the County Development Plan and related provisions have been integrated into the LAP. In addition, land use zoning contained within the 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.

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 County 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 Galway 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 Local Area Plan and the County Development Plan⁵¹

Topic	Potentially Significant		O THE LOCAL Area Plan and the County Development Plan ³² Existing Galway County Development Plan 2022-2028 measures, including:
Topic	Adverse Effect, if	Eocal Area Flair measures, including.	Existing damay country bevelopment I am 2022 2020 including.
	Unmitigated		
Various -	Various – see below	Strategic Aims	MM1 Monitoring. The Council shall, in conjunction with the Regional Assembly and other sources as relevant, implement the monitoring programme
see below		Promote development of the Town Centre to	as set out in the SEA Environmental Report and Statement. This will include the preparation of stand-alone SEA Monitoring Reports:
		enhance the vitality and viability of Tuam with	
		a focus on providing for retail, commercial and	
		residential development. Development will be	
		focused within the town centre to act as the	
		economic, social and cultural hub of the town.	provided for by existing plans/ programmes or are not already permitted, are subject to the undertaking of feasibility assessment, taking into account
		Support investment in regeneration and other town centre improvement works to maintain	planning need, environmental sensitivities as identified in the SEA Environmental Report and the policy objectives of the Plan relating to sustainable mobility. Where feasibility is established, a Corridor and Route Selection Process will be undertaken where appropriate, for relevant new road
		Tuam as an attractive place to work and visit.	infrastructure in two stages: Stage 1 – Route Corridor Identification, Evaluation and Selection; and Stage 2 – Route Identification, Evaluation and
		TKT 2 Service Led Development	Selection.
		Development under the plan shall be	WM 5 Construction and Environmental Management Plans. Construction Environment Management Plans shall be prepared in advance of the
		preceded by sufficient capacity in the public	construction of relevant projects and implemented throughout. Such plans shall incorporate relevant mitigation measures which have been integrated
		wastewater infrastructure and potable water	into the Plan and any lower tier Environmental Impact Statement or Appropriate Assessment. CEMPs typically provide details of intended construction
		infrastructure. Potential developers shall make	practice for the proposed development, including:
		a Pre-Connection Enquiry to Uisce Éireann in	a) location of the sites and materials compound(s) including area(s) identified for the storage of construction refuse;
		order to establish the feasibility of a	b) location of areas for construction site offices and staff facilities;
		connection to the public network.	c) details of site security fencing and hoardings;
		TKT 3 Environmental Assessment	d) details of on-site car parking facilities for site workers during the course of construction;
		To require the preparation and assessment of	e) details of the timing and routing of construction traffic to and from the construction site and associated directional signage;
		all planning applications in the plan area to have regard to the information, data and	f) measures to obviate queuing of construction traffic on the adjoining road network; g) measures to prevent the spillage or deposit of clay, rubble or other debris;
		requirements of the Appropriate Assessment	h) alternative arrangements to be put in place for pedestrians and vehicles in the case of the closure of any public right of way during the course of
		Natura Impact Report, SEA Environmental	site development works;
		Report and Strategic Flood Risk Assessment	i) details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels;
		Report that accompany this LAP.	j) containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained (such bunds
		TKT 5 Residential Development Phasing	shall be roofed to exclude rainwater);
		Support the development of lands designated	k) disposal of construction/demolition waste and details of how it is proposed to manage excavated soil, including compliance with 2006 Best Practice
		as Residential (Phase 1) within the lifetime of	Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects, Department of the Environment, Heritage and
		the plan, subject to normal planning, access	Local Government;
		and servicing requirements, and reserve the lands designated as Residential (Phase 2) for	l) a water and sediment management plan, providing for means to ensure that surface water runoff is controlled such that no silt or other pollutants enter local water courses or drains.
		the longer-term growth needs of Tuam.	WM 6 Waste Management. To continue to meet the duties under the Waste Management (certification of historic unlicensed waste disposal and
		Residential (Phase 2) lands are generally not	recovery activity) Regulations 2008, including those in relation to the identification and registration of closed landfills.
		developable for housing within the lifetime of	WM7 Recycling Infrastructure. To provide for the provision of recycling infrastructure throughout the county where it is considered necessary and
		this plan, with the exception of the following	support the provision of additional recycling infrastructure throughout the county.
		developments, which may be considered by	WM 8 Sustainable Waste Management Practices. Promote and facilitate communities to become involved in environmental awareness activities and
		the Planning Authority, subject to a suitable	community based recycling initiatives or environmental management initiatives that will lead to local sustainable waste management practices.
		evidence based case being for the proposal:	WM 9 Separate Collection of Waste. Encourage and support the provision of separate collection of waste in accordance with the requirements of the
		(refer to Plan for more detail)	Waste Management (Food Waste) Regulations 2009, the Waste Framework Directive Regulations, 2011 and other relevant legislation.
		TKT 6 Residential Infill Development	MAS 1 Separation Distances from SEVESO Sites. To ensure that appropriate distances are maintained between any proposed development and any
		Within the settlement boundary, small scale	existing Seveso II establishment, in the interest of the health and safety of the occupiers of the proposed development. MAS 3 Soil Protection Magazine. To require that the citing of pow establishments are medification of existing establishments classified under the
		limited infill housing development will be considered on appropriate sites. These infill	MAS 2 Soil Protection Measures. To require that, the siting of new establishments, or modification of existing establishments classified under the Seveso II Directive, and new development in the vicinity of existing establishments shall take into account the need to prevent major accidents
		sites shall have regard to the existing	involving hazardous substances and safeguard both the public and the environment.
		character of the street, respecting the existing	MAS 3 SEVESO III Sites. Take into account the provisions of the Major Accidents Directive, relating to the control of major accident hazards involving
		building line, scale, proportions, layout,	dangerous substances, and the recommendations of the Health and Safety Authority in the assessment of all planning applications located within the
		heights and materials of surrounding	consultation distance of such sites.
		developments. A proposed site must have a	TI 4 Tourism and Infrastructure Capacity. The potential environmental effects of a likely increase in tourists/tourism-related traffic volumes in
		safe means of access and egress and comply	particular locations/along particular routes shall be considered and mitigated as appropriate. Such a consideration should include potential impacts on
		with development management standards for	existing infrastructure (including drinking water, wastewater, waste and transport) resulting from tourism proposals. Galway County Council will
		<u></u>	

⁵¹ 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. CAAS for Galway County Council

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Topic	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including:	Existing Galway County Development Plan 2022-2028 measures, including:
Торіс	Adverse Effect, if	new dwellings. TKT 7 Sequential Development Endeavour to promote the orderly and phased development of residential development in accordance with the principles of the sequential approach as set out in the Sustainable Residential Development in Urban Areas (Cities, Towns and Villages) Guidelines 2009 (or as updated). This shall include a positive presumption in favour of the sequential development of suitably serviced Residential Phase 1 lands emanating outwards from the town core and/or sequential extensions to the existing residential fabric of suitably serviced Residential Phase 1 lands within the LAP boundary, subject to the principles of proper planning and sustainable development and the current County Development Plan. TKT 9 Town Centre 1. It is a policy objective of Galway County Council that Tuam Town Centre will remain the primary focus for the location of new retail and commercial development. The Planning Authority will ensure that the location of future retail development is consistent with the key policy principles and order of priority as set out in the Guidelines for Planning Authorities: Retail Planning 2012 (and any updated/superseded document) and will require Retail Impact Assessments, including details of the sequential approach and Design Statements for retail developments in accordance with the Retail Planning Guidelines. 2. This plan will also promote the development of commercial and complementary mixed uses, on suitable land that can provide a focal point for the provision of services to the town and opportunities for commercial enterprises, retail developments and employment creation. 3. The plan will protect and enhance the vitality and viability of the town centre by ensuring that it remains the primary retail, commercial and mixed-use centre of Tuam and prohibit a proliferation of any individual use or other uses, which in the opinion of the	support Irish Water and Fáilte Ireland to ensure that tourism is serviced by adequate and appropriate water services infrastructure. MCH 2 Marine Based Environment. It is a policy objective of the Local Authority to protect and enhance where appropriate marine biodiversity in accordance with proper planning and sustainable development. MCC 1 Environmental Values of the Coast. Protect the amenity, character, visual, recreational, economic potential and environmental values of the coast. Ensure that natural coastal defences including sand dunes, beaches and coastal wellands are not compromise by inappropriate development. MCC 2 Protection of Coastal Habitats. To strictly control the nature and pattern of development within coastal areas and ensure that it is designed and landscaped to the highest standards and sited appropriately so as not to detract from the visual amenity of the area. (a) Development shall be prohibited where the development poses a significant or potential threat to coastal habitats or features, and/or where the development is likely to result in altered patterns of erosion or deposition elsewhere along the coast; (b) To prohibit development along the coast outside existing towns and villages where such development is not adequately safeguarded over the lifetime of the development without the need to construct additional coastal defences. MCC 3 Protection of Coastal Area. It is a policy objective to protect the Coastal Area through the following measures: (a) Enveronment of the conservation of coastal area are in accordance with best practice and measures to protect the coastal coastal adaptats are supported; (b) To prohibit development without the need to construct additional coastal adefences. MCC 3 Protection of Coastal Area in coastal areas are in accordance with best practice and measures to protect the coastal area. (c) Protect, enhance and conserve beaches in the County from inappropriate development and seek to maintain the current status of the designated Blue Flag beaches an
		and prohibit a proliferation of any individual	

Topic	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including:	Existing Galway County Development Plan 2022-2028 measures, including:
	Ommagaca	town including natural heritage and biodiversity and its local amenities. TKT 28 Tuam Regeneration Masterplan It is a policy objective of Galway County Council to support and facilitate the implementation of the Tuam Regeneration Masterplan. TKT 63 Development Management Standards and Guidelines Ensure that the general development management standards and guidelines set out in the current Galway County Development Plan 2022-2028, or any subsequent variation or review shall apply as appropriate in the plan area. In addition, any specified development management guidelines set out within this Local Area Plan shall also be	
		applied, as appropriate, to development	
Biodiversity and flora and fauna	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, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna; • Habitat loss, fragmentation and deterioration, including patch size and edge effects; and • Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species such as birds (e.g. swifts) and bats.	proposals in the plan area. TKT 18 Open Space/ Recreation & Amenity Promote the sustainable management, use and/or development, as appropriate, of open space/recreation and amenity lands. This will include: - Development of open spaces, sport and recreational activities, in accordance with best practice and on appropriate lands with suitable levels of access to local community; - Existing open space, sport and recreational facilities should be retained unless it can be clearly demonstrated to the satisfaction of Galway County Council that these uses are surplus to requirements of the local community or are to be replaced by an equivalent or better provision; - Appropriate management and use of any flood risk areas within the Open Space/Recreation and Amenity zone to avoid, reduce and/or mitigate, as appropriate the risk and potential impact of flooding. - Appropriate management and use of any areas of high biodiversity value. TKT 19 Tourism Development Encourage and assist in the development of the sustainable tourism potential within Tuam in a manner that respects, builds on, protects and enhances the cultural, built, architectural, archaeological and heritage significance of the town including natural heritage and biodiversity and its local amenities. TKT 45 European Sites Protect European sites that form part of the European Sites network (including Special Protection Areas and Special Areas of	Also refer to detailed measures for settlements contained in Volume 2 of the Plan. LP 1 Lighting Schemes. To require that all developments shall ensure lighting schemes are designed so that excessive light spillage is minimised to ensure light pollution in the surrounding environment including residential amenity, wildlife and near public roads is limited. Such lighting schemes shall be submitted and agreed with the Planning Authority. LP 2 Lighting and Climate Action. To require the use of low energy LED (or equivalent) lighting in support of Climate Action. LP 3 Dark Skies. To encourage the maintenance of dark skies in rural areas and to limit light pollution in urban and rural areas. F2 Sustainable Development. To encourage the development of a well-managed sustainable forestry sector, which is compatible with the protection of the environment including the avoidance of likely significant effects on European istes (SACs and SPAs) and is planted, managed and harvested in accordance with the Forest Service Guidelines for Landscape, Forest Harvesting and Environmental, Archaeology, Biodiversity and Water Quality. F3 Native Woodlands. To ensure that existing native woodlands are protected and enhanced and, where appropriate, encourage the conversion of coniferous forest to native woodlands with a focus on opportunities for habitat linkage and wider eco-services. F4 Forestry Development. To encourage forestry and forestry related development, as a means of diversifying from traditional agriculture activity with a preference for native species. F5 Deforestation. To promote the avoidance of deforestation or commercial afforestation within European sites unless directly relating to the management of the service for its qualifying interests. MEQ2 "Protection of the Environment. The Council shall require the following in relation to the management of authorised aggregate extraction (a) All quarries shall comply with the requirements of the EU Habitats Directive, the Planning and Development (Amendent) Act 201

Topic

Potentially Significant | Local Area Plan measures, including:

	Adverse Effect, if Unmitigated	Local Area Plan measures, including:	Existing Galway County Development Plan 2022-2028 measures, including:
		requirements in the EU Habitats Directive (92/43/EEC), EU Birds Directive (2009/147/EC), the Planning and Development (Amendment) Act 2010, the European Communities (Birds and Natural Habitats) Regulations 2011 (SI No. 477 of 2011) (and any subsequent amendments or updated legislation) and having due regard to the guidance in the Appropriate Assessment Guidelines 2010 (and any updated/superseding guidance). (refer to Plan for more detail) TKT 62 Trees, Parkland/Woodland and Hedgerows (a) Protect important trees, tree clusters and hedgerows in the plan area and ensure that development proposals take cognisance of significant trees/tree stands. Ensure that all planning schemes use suitable native variety of trees. (b) Seek to retain natural boundaries, including stone walls, hedgerows and tree boundaries, wherever possible and replace with a boundary type similar to the existing boundary where removal is unavoidable. Discourage the felling of mature trees where possible. All works to be carried out in accordance with the provisions of the Forestry Act, 1946 (as amended). (c) Carry out a tree survey on important tree stands within the plan area by suitably qualified personnel.	Areas, proposed Natural Heritage Areas, Ramsar Sites, Nature Reserves, Wild Fowl Sanctuaries (and other designated sites including any future designations) and the promotion of the development of a greenyl ecological network. NHB 2 European Sites and Appropriate Assessment. To implement Article 6 of the Baltats Directive and to ensure that Appropriate Assessment is NHB 2 European Sites and Appropriate Assessment. To implement Article 6 of the Baltats Directive and to ensure that Appropriate Assessment in Complain and the Appropriate Assessment in Complain and Appropriate Assessment in Complain and Appropriate Assessment in Complain and Appropriate Assessment in Complain Appr
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	_	P 2 Best Practice in Peatland conservation and management. Work in partnership with relevant stakeholders on all suitable peatland sites to
		demonstrate best practice in sustainable peatland conservation, management and restoration techniques and to promote their heritage and
		educational value subject to Ecological Impact Assessment and Appropriate Assessment Screening, as appropriate.
		P3 Framework Plans. Seek to support relevant agencies such as Bord na Mona in advancing rehabilitation works for the peatlands and related
1		infrastructure, to provide for the future sustainable and environmentally sensitive use of peatlands sites including for amenity purposes.
		IS 1 Control of Invasive and Alien Invasive Species. It is a policy objective of the Planning Authority to support measures for the prevention and
		eradication of invasive species.
		IS 2 Invasive Species Management Plan. Ensure that proposals for development do not lead to the spread or introduction of invasive species. If
1		developments are proposed on sites where invasive species are currently or were previously present, an invasive species management plan will be
		required. A landscaping plan will be required for developments near water bodies and such plans must not include alien invasive species.
1		PO 1 Delivery of All Ireland Pollinator Plan
		To facilitate the delivery of the All Ireland Pollinator Plan where possible. In the interest of preserving and enhancing biodiversity and working in
1		conjunction with the All Ireland Pollinator Plan, it shall be the policy objective of the Planning Authority to ensure that at least 20% of the green
		space on all housing estates being built will have to be dedicated, developed and maintained as a pollinator zone. The area dedicated can be confined
		to one single lot or various lots around the site providing that the total area of the lots meets the minimum requirement of 20%. The pollinator zones
		should be planted with a mix of pollinator friendly-bulbs, self-seeding annuals and biennials, perennials, shrubs, trees, fruit trees and fruit bushes and
1		the majority of this planting should consist of native plants.
		TWHS 1 Trees, Hedgerows, Natural Boundaries and Stone Walls
1		Protect and seek to retain important trees, tree clusters and tree boundaries, ancient woodland, natural boundaries including stonewalls, existing
1		hedgerows particularly species rich roadside and townland boundary hedgerows, where possible and replace with a boundary type similar to the
		existing boundary. Ensure that new development proposals take cognisance of significant trees/tree stands and that all planting schemes developed
1		are suitable for the specific site and use suitable native variety of trees of Irish provenance and hedgerows of native species. Seek Tree Management
1		Plans to ensure that trees are adequately protected during development and incorporated into the design of new developments.
		TWHS 2 Planting of Trees and Woodlands
		Encourage and promote in co-operation with Coillte and the Department of Agriculture, Food and the Marine and other organisations, the planting of
1		trees and woodlands, as an important means of contributing to its objective of sustaining, protecting and enhancing the County's biodiversity, natural
		resources, amenity, landscape and developing tourism product. Encourage community woodlands in urban/urban fringe areas utilising funding
		available through schemes such as the NeighbourWood and Native Woodland Schemes.
		TWHS 3 Protection of Forestry
		Protect all substantial areas of deciduous forest, other than areas of commercial forestry. Proposals for development in these areas should seek to
		interact with the landscape character of the forested areas and its limits while also enhancing the forested areas so as to increase biodiversity value.
		BMSP 8 Jetty/Marina Development.
		Support the preparation of a feasibility study for a jetty/marina development in the vicinity of Bearna Pier and any necessary marine/foreshore works
		to facilitate public access to and use of the area around the pier, such as breakwaters. This feasibility study shall take account of the requirements to
1		comply with the European Habitats Directive
		CT 2 Water Sports
1		To encourage the development of coastal tourism in areas such as water-sports and water-related activities and events subject to normal planning
1		and environmental criteria
		CT3 Tourism Development
		To support proposals for tourism development in coastal areas where it can be demonstrated that there will be no negative impacts on the amenities
		of the area, the integrity of the natural environment or the economic value of the County's coastline and beaches.
		CT 4 Blue Flags
		To continue to work with An Taisce, the local community and other relevant stakeholders to retain and increase the number of Blue Flag awards in
		the County.
		CT 5 Tourism Products
		To support the protection and enhancement of our islands, coastline and waterways as tourism products and attractions, subject to community and
1		environmental carrying capacity.
		HT 3 Sustainable Tourism Industry
		To support the development of a more sustainable tourism industry which minimises adverse impacts on local communities, the built heritage,
1		landscapes, habitats and species; leaving them undiminished as a resource for future generations, while supporting social and economic prosperity.
		GICT 3 Tourism Development within An Ghaeltacht and Islands
		(a) Encourage and facilitate the development of the tourism potential of the Gaeltacht and Islands in a manner that respects, builds on, protects and
1		enhances the cultural, built and natural heritage and local amenities of the area;
		(b) Provide where feasible and support the provision of tourism infrastructure and services including, walking, cycling and water-based infrastructure
		and short-term guest accommodation facilities throughout the Gaeltacht area in appropriate locations. Such infrastructure and services shall seek to
	1	manage any increase in visitor numbers in order to avoid significant effects including loss of habitat and disturbance and ensuring that any new
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Topic	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including:	Existing Galway County Development Plan 2022-2028 measures, including:
			projects, such as greenways are developed at suitable locations. RE4 Solar Energy Developments. Promote and facilitate solar farm developments in suitable locations, having regard to areas of the County designated for this purpose in the Local Authority Renewable Energy Strategy. The Planning Authority will assess any planning application proposals for solar energy production having due regard to the Habitats Directive and to the detailed policy objectives and Development Standards set out in the Local Authority Renewable Energy Strategy.
Population and human health	Potential adverse effects arising from flood events. Potential interactions if effects arising from environmental vectors.	Also refer to measures under other environmental components including Soil, Water and Air and Climatic Factors. Strategic Aim Ensure sustainable settlement patterns, including the provision of necessary planning framework to accommodate educational, community, leisure and recreational facilities to satisfactorily complement the population increase.	Also refer to measures under other environmental components including Soil, Water and Air and Climatic Factors. AQ 1 Ambient Air Quality To promote the preservation of best ambient air quality compatible with sustainable development in accordance with the EU Ambient Air Quality To promote the preservation of best ambient air quality compatible with sustainable development in accordance with the EU Ambient Air Quality To require developments are duality To require developments which would have the potential to have adverse impacts on air quality to carry out assessments of the impact of the development on air quality. AQ 3 Air Quality Mitigation Measures To require the use of appropriate mitigation measures such as dust dampeners to minimise the potential impacts of developments on air quality. AQ 4 Air Purification Galway County Council shall have regard, to the specific guidance on radon prevention measures for new homes as contained within them so and willages as a means of air purification, the filtering of suspended particles and the improvement of their micro-climate. AQ 5 Radon Galway County Council shall have regard, to the specific guidance on radon prevention measures for new homes as contained within the existing Building Requisitions (including any updated/superseding Requisitions that may be published within the lifetime of this Development Plan). NP 1 Galway County Council Noise Action Plan 2019-2023 To implement the Galway County Council Noise Action Plan 2019-2023 To implement the Galway County Council Noise Action Plan 2019-2023 To require that where new developments are proposed within the noise limits of the noise maps for the designated sections of roads in the County, appropriate mitigation measures are undertaken so as to prevent harmful effects, including annoyance, due to environmental noise exposure. NP3 Noise Impact Assessments To require that where new developments are proposed within the noise limits of the noise maps for the designated sections of roads in the County, appropriate im
			MAS 2 Soil Protection Measures To require that, the siting of new establishments, or modification of existing establishments classified under the Seveso II Directive, and development in the vicinity of existing establishments shall take into account the need to prevent major accidents involving hazardous substance.

Topic	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including:	Existing Galway County Development Plan 2022-2028 measures, including:
			and the recommendations of the Health and Safety Authority in the assessment of all planning applications located within the consultation distance of such sites.
Soil	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.	Also refer to measures under other environmental components including Water.	Also refer to measures under other environmental components including Water. SQ 1 Soil Impact Assessments Ensure good soil quality throughout the county by requiring developments of a certain nature (as specified in the relevant environmental legislation) to carry out assessments of the impact of the development on soil quality. SQ 2 Soil Protection Measures To ensure that adequate soil protection measures are undertaken where appropriate. SQ 3 Soil Protection, Contamination and Remediation Adequate and appropriate investigations shall be carried out into the nature and extent of any soil and groundwater contamination and the risks associated with site development work, where brownfield development is proposed. All undeveloped, contaminated sites shall be remediated to internationally accepted standards prior to redevelopment. All applications shall be accompanied by a report from a qualified, expert consultant
			remediation incorporating international best practice and expertise on innovative ecological restoration techniques including specialist planting and green initiatives that create aesthetically improved sites, healthy environments and contribute to the provision of new green open spaces as integral parts of newly created areas. Treatment/management of any contaminated material shall comply as appropriate with the Waste Management Act 1996 (waste licence, waste facility permit), as amended, and under the EPA Act 1992 (Industrial Emissions licensing, in particular the First Schedule, Class 11 Waste), as amended. These measures will ensure that contaminated material will be managed in a manner that removes any risk to human health and ensures that the end use will be compatible with any risk. PG 1 Geological and Geo-Morphological Systems Protect and conserve geological and geo-morphological systems, county geological heritage sites and features from inappropriate development that
			would detract from their heritage value and interpretation and ensure that any plan or project affecting karst formations, eskers or other important geological and geo-morphological systems are adequately assessed with regard to their potential geophysical, hydrological or ecological impacts on the environment. PG 2 Geological Heritage of County Galway Support the implementation of recommendations made in the Geological Heritage of County Galway – An Audit of County Geological Sites in County Galway (2019). Consult with the Geological Survey of Ireland when undertaking, approving or authorising developments which are likely to impact on County Geological Sites or involve significant ground excavations including sites identified as part of the Geological Heritage of County Galway – An Audit of County Geological Sites in County Galway (2019). PG 3 Promotion of and Access to Geological Sites
			Encourage greater awareness of the geological heritage sites of the county and promote, where appropriate, public access to geological and geomorphological sites and avoid inappropriate development. ESK 1 Protection of Eskers Systems Protect and conserve the landscape, natural heritage and biodiversity value of esker systems in the county. Assess applications for quarrying and other proposed developments with reference to their status or relative importance, for example, amenity, landscape and scientific value in the context of the overall esker system.
			ESK 2 Esker Areas Have regard to the Landscape Character Assessment of the County of Galway and its recommendations relating to the Esker areas and any other subsequent relevant reports/ data. UGG 1 UNESCO Global Geopark Status. To continue to work in partnership with all relevant stakeholders to facilitate and support the ongoing work of the Joyce Country and Western Lakes aspiring Geopark and its application for full UNESCO Global Geopark status. Support initiatives in relation to the Burren Lowlands, The Burren and
Water	Potential adverse	Also refer to measures under other	Cliffs of Moher UNESCO Global Geopark that relate to the county. Also refer to measures under other environmental components including Soil and Material Assets.
	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	environmental components including Soil and Material Assets. TKT 18 Open Space/ Recreation & Amenity Promote the sustainable management, use and/or development, as appropriate, of open space/recreation and amenity lands. This will include: - Development of open spaces, sport and	RH 11 Waste Water Treatment provision. Provide for sustainable rural housing in the county in accordance with the EPA Code of Practice: Wastewater Treatment Systems for Single Houses (2009). AD4 Agriculture Waste. To ensure agricultural waste is managed and disposed of in a safe, efficient and sustainable manner having regard to the environment and in full compliance with the European Communities Good Agricultural Practice for the Protection of Waters Regulations (2014) and relevant best practice guidelines. WS 1 Enhancement of Water Supply Infrastructure Liaise with Irish Water, to maximise the potential of existing capacity and to facilitate the timely delivery of new water services infrastructure, to
	morphology. • Increase in flood risk	recreational activities, in accordance with best	facilitate existing and future growth. WS 2 Protection of Water Supplies Collaborate with Irish Water and the Group Water Federation Scheme to protect, conserve and enhance all existing and potential water resources in

associated with flood associated with flood CAAS for Galway County Council

Topic	Potentially Significant Adverse Effect, if Unmitigated		Existing Galway County Development Plan 2022-2028 measures, including:
	events.	facilities should be retained unless it can be	the parameters identified in these Regulations.
	events.	clearly demonstrated to the satisfaction of	WS 3 River Basin Management Plan for Ireland 2018-2021
		Galway County Council that these uses are	Support the implementation of the relevant recommendations and measures as outlined in the relevant River Basin Management Plan 2018-2021, and
		surplus to requirements of the local	associated Programme of Measures, or any such plan that may supersede same during the lifetime of this plan.
		community or are to be replaced by an	WS 4 Requirement to Liaise with Irish Water – Water Supply
		equivalent or better provision;	Ensure that new developments are adequately serviced with a suitable quantity and quality of drinking water supply and require that all new
		- Appropriate management and use of any	developments intending to connect to a public water supply liaise with Irish Water with regard to the water (and wastewater) infrastructure required.
		flood risk areas within the Open	WS 5 Private Water Supply
		Space/Recreation and Amenity zone to avoid,	Support the provision of a private water supply in instances where there is no public water supply
		reduce and/or mitigate, as appropriate the	or where the existing supply does not have sufficient capacity to serve the proposed development. This will only be considered where it can be
		risk and potential impact of flooding.	demonstrated that the proposed water supply meets the standards set out in the EU and national legislation and guidance including adherence to
		- Appropriate management and use of any	Article 6 of the EU Habitats Directive, and would not be prejudicial to public health or would not significantly impact negatively on the source or yield
		areas of high biodiversity value.	of an existing supply."
		TKT 46 Constrained Land Use	WS 6 Water Framework Directive
		To facilitate the appropriate management and	Support the preparation of Drinking Water Safety Plans and Source Protection Plans to protect sources of public water supply, in accordance with the
		sustainable use of Flood Risk within the zoning plan area. This zoning indicates where	requirements of the Water Framework Directive. WS 7 Water Quality
		the Plan Making Justification Test may need	Require that new development proposals would ensure that there would not be an unacceptable impact on water quality and quantity including
		to be applied and as such can limit new	surface water, ground water, designated source protection areas, river corridors and associated wetlands.
		development, while recognising that existing	WS 8 Proliferation of Septic Tanks
		development uses within these zones may	Encourage the use of high standard treatment plants to minimise the risk of groundwater pollution.
		require small scale development, as outlined	CWS 1 Water Conservation with all Developments
		below, over the life of the Local Area Plan,	To ensure all developments incorporate water conservation measures such as rainwater harvesting to minimise wastage of water supply.
		which would contribute towards the compact	CWS 2 Water Mains Rehabilitation
		and sustainable urban development of the	To assist Irish Water in their commitment to water conservation and support efforts to tackle leakage through find and fix (active leakage control)
		town. New development will generally be	and water mains rehabilitation.
		limited to water-compatible uses in Flood	CWS 3 Promotion of Water Conservation
		Zone A, and less vulnerable or water	To support Irish Water in promoting public awareness and involvement in water conservation measures by households, business and industry.
		compatible uses in Flood Zone B, and a	WW 1 Enhancement of Wastewater Supply Infrastructure
		detailed site-specific Flood Risk Assessment will be required in these areas. The underlying	Work in conjunction with Irish Water to maximise the potential of existing capacity and to facilitate the delivery of new wastewater services infrastructure, to facilitate future growth in the county.
		zoning or the existing permitted uses may be	WW 2 Delivery of Wastewater Infrastructure
		deemed to be acceptable in principle,	Liaise and co-operate with Irish Water in the implementation and delivery of the Water Services Strategic Plan (2015) and the Irish Water Investment
		however within Flood Zone A/B development	Plan 2020-2024 and other relevant investment works programmes of Irish Water in the delivery of infrastructure within the county.
		is typically limited to extensions, renovations	WW 3 The Greater Galway Area Strategic Drainage Study
		and change of use. Infill highly vulnerable	To seek to accelerate and support the delivery of the Greater Galway Area Strategic Drainage Study and the associated solutions as identified in the
		development and demolition and	RSES as an essential infrastructure requirement in conjunction with the Department of the Environment, Climate and Communications, Irish Water
		reconstruction can only take place in Flood	and Galway City Council.
		Zone C. Less vulnerable development in Flood	WW 4 Requirement to Liaise with Irish Water – Wastewater
		Zone B will also need to be considered	Ensure that new developments will only be permitted which are adequately serviced with sufficient
		carefully. These aspects are assessed on a	capacity for appropriate collection, treatment and disposal (in compliance with the Water Framework Directive and River Basin Management Plan) to
		case by case basis under the application of	the public sewer unless provided for otherwise by the plan. Developers shall liaise with Irish Water with regard to the wastewater (and water)
		the Plan Making Justification Test and as	infrastructure to ensure sufficient capacity is available prior to the submission of a planning application. " WW 5 Serviced Sites
		supported by specific objectives in the written statement.	Support the servicing of small towns and villages including initiatives to provide an alternative to one-off housing in the countryside, in accordance
		Where the Justification Test is passed there is	with the National Planning Framework.
		also a requirement for a detailed Flood Risk	WW 6 Private Wastewater Treatment Plants
		Assessment at Development Management	Ensure that private wastewater treatment plants, where permitted, are operated in compliance with Environmental Protection Agency (EPA) Code of
		stage. The FRA should be carried out in	Practice for Domestic Waste Water Treatment System 2021 (Population Equivalent ≤10).
		accordance with The Planning System and	WW 7 Sustainable Drainage Systems
		Flood Risk Assessment Guidelines and Circular	To require the use of Sustainable Drainage Systems to minimise and limit the extent of hard surfacing and paving and require the use of SuDS
		PL 2/2014 (or as updated), which shall assess	measures be incorporated in all new development (including extensions to existing developments). All development proposals shall be accompanied
		the risks of flooding associated with the	by a comprehensive SuDS assessment including run-off quantity, run off quality and impacts on habitat and water quality.
		proposed development.	WW 8 Storm Water Infrastructure
		Specifications for developments in flood	To support the improvement of storm water infrastructure and to increase the use of sustainable drainage and reduce the risk of flooding in urban
		vulnerable areas set out in this plan shall be	environments.

Topic	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including:	Existing Galway County Development Plan 2022-2028 measures, including:
		complied with as appropriate. TKT 47 Flood Risk Management Guidelines	WW 9 Integrated Wetland Wastewater Treatment Systems Galway County Council will encourage the use of integrated wetland wastewater treatment systems for both one off and multi-unit housing developments that accord with the prevailing regulations and standards including the relevant EPA Code of Practice.
		It is a policy objective of Galway County Council to support, in co-operation with the OPW, the implementation of the EU Flood Risk Direction (2007/60/EC), the Flood Risk	WW10 Surface Water Drainage To require all new developments to provide a separate foul and surface water drainage system and to incorporate sustainable urban drainage systems where appropriate in new development and the public realm. WW11 Protection of Irish Water Collection Systems
		Regulations (SI No. 122 of 2010) and the DEHLG/OPW publication The Planning System and Flood Risk Management Guidelines	To prohibit the discharge of additional surface water to combined (foul and surface water) sewers in order to maximise the capacity of existing collection systems for foul water. AF 1 Marine Aquaculture
		(2009) (and any updated/superseding legislation or policy guidance) and Department Circular PL2/2014 or	To support the sustainable development of marine aquaculture and fishing industries, so as to maximise their contribution to jobs and growth in coastal communities where it can be demonstrated that the development will not have significant adverse effects on the environment. SF 1 Shellfish Waters Directive
		updated/superseding version. TKT 48 Flood Risk Management and Assessment	To continue to work with local communities, relevant stakeholders and with the Department of Agriculture, Food and Marine to ensure the proper and successful implementation of the Shellfish Waters Directive along County Galway's coastline. SF 2 Protection of Shellfish Waters
		It is a policy objective of the Council to comply with the requirements of the DoEHLG/OPW <i>The Planning System and Flood</i>	To seek to protect the quality of designated shellfish waters off the County Galway coast. WR 1 Water Resources Protect the water resources in the plan area, including rivers, streams, lakes, wetlands, springs, turloughs, surface water and groundwater quality, as
		Risk Management Guidelines for Planning Authorities and its accompanying Technical Appendices Document 2009 (including any updated/superseding documents). This will include the following:	well as surface waters, aquatic and wetland habitats and freshwater and water dependant species in accordance with the requirements and guidance in the EU Water Framework Directive 2000 (2000/60/EC), the European Union (Water Policy) Regulations 2003 (as amended), the River Basin District Management Plan 2018 – 2021 and other relevant EU Directives, including associated national legislation and policy guidance (including any superseding versions of same) and also have regard to the Freshwater Pearl Mussel Sub-Basin Management Plans. WR 2 River Basin Management Plans
		(a) Avoid, reduce and/or mitigate, as appropriate in accordance with the Guidelines; (b) Development proposals in areas where	It is a policy objective of the Planning Authority to implement the programme of measures developed by the River Basin District Projects under the Water Framework Directive in relation to: Surface and groundwater interaction, Dangerous substances, Hydro-morphology, Forestry, On site wastewater treatment systems, Municipal and industrial discharges, Urban pressures, Abstractions. WTWF 1 Wetland Sites
		there is an identified or potential risk of flooding or that could give rise to a risk of flooding elsewhere will be required to carry out a Site Specific Flood Risk Assessment, and Justification Test where appropriate, in accordance with the provisions of the	Protect and conserve the ecological and biodiversity heritage of the wetland sites in the County. Ensure that an appropriate level of assessment is completed in relation to wetland habitats that are subject to proposals which would involve drainage or reclamation that might destroy, fragment or degrade any wetland in the county. This includes lakes and ponds, turloughs, watercourses, springs and swamps, marshes, fens, heath, peatlands, some woodlands as well as some coastal and marine habitats. Protect Ramsar sites under The Convention on Wetlands of International Importance (especially as Waterfowl Habitat).
		Planning System and Flood Risk Management Guidelines 2009 (or any superseding document); Any flood risk assessment should	(a) Protect and conserve the quality, character and features of inland waterways by controlling developments close to navigable and non-navigable waterways in accordance with best practice guidelines. (b) Preserve, protect and enhance Galway's inland lakes and waterways for their amenity and recreational resource amenity.
		include an assessment of the potential impacts of climate change, such as an increase in the extent or probability of	(c) Protect the riparian zones of watercourse systems throughout the County, recognising the benefits they provide in relation to flood risk management and their protection of the ecological integrity of watercourse systems and ensure they are considered in the land use zoning in Local Area Plans.
		flooding, and any associated measures necessary to address these impacts; (c) Development that would be subject to an inappropriate risk of flooding or that would cause or exacerbate such a risk at other	 (d) The Planning Authority will support in principle the development and upgrading of the Inland Waterways and their associated facilities in accordance with legislation, best practice and relevant management strategies, key stakeholders and bodies including Waterways Ireland. (e) Ensure all abstractions of water will be subject to assessment for compliance with the requirements of Article 6 of the Habitats Directive. (f) Seek to provide additional accesses to lake shores and rivers for public rights of way, parking and layby facilities, where appropriate. (g) Developments shall ensure that adequate soil protection measures are undertaken, where appropriate, including investigations into the nature
		locations shall not normally be permitted; (d) Galway County Council shall work with other bodies and organisations, as appropriate, to help protect critical	and extent of any soil/groundwater contamination. FL 1 Flood Risk Management Guidelines It is the policy objective of Galway County Council to support, in co-operation with the OPW, the implementation of the EU Flood Risk Directive (2007/60/EC), the Flood Risk Regulations (SI No. 122 of 2010) and the DEHLG/OPW publication The Planning System and Flood Risk Management
		infrastructure, including water and wastewater, within the County from risk of flooding.	Guidelines (2009) (and any updated/superseding legislation or policy guidance) and Department Circular PL2/2014 or any updated / superseding version. FL 2 Flood Risk Management and Assessment
		TKT 49 Principles of Flood Risk Management Guidelines The Council shall implement the key principles of flood risk management set out in the Flood	Comply with the requirements of the DoEHLG/OPW The Planning System and Flood Risk Management Guidelines for Planning Authorities and its accompanying Technical Appendices Document 2009 (including any updated/superseding documents). This will include the following: (a) Avoid, reduce and/or mitigate, as appropriate in accordance with the Guidelines;

Topic	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including:	Existing Galway County Development Plan 2022-2028 measures, including:
		Risk Management Guidelines as follows: (a) Avoid development that will be at risk of flooding or that will increase the flooding risk elsewhere, where possible;	(b) Development proposals in areas where there is an identified or potential risk of flooding or that could give rise to a risk of flooding elsewhere will be required to carry out a Site-Specific Flood Risk Assessment, and justification test where appropriate, in accordance with the provisions of The Planning System and Flood Risk Management Guidelines 2009 (or any superseding document); Any flood risk assessment should include an assessment of the potential impacts of climate change, such as an increase in the extent or probability of flooding, and any associated measures
		(b) Substitute less vulnerable uses, where avoidance is not possible; and,	necessary to address these impacts; (c) Development that would be subject to an inappropriate risk of flooding or that would cause or exacerbate such a risk at other locations shall not
		(c) Mitigate and manage the risk, where avoidance and substitution are not possible.	normally be permitted; (d) Galway County Council shall work with other bodies and organisations, as appropriate, to help protect critical infrastructure, including water and
		Development should only be permitted in areas at risk of flooding when there are no	wastewater, within the County, from risk of flooding. FL 3 Principles of the Flood Risk Management Guidelines
		alternative reasonable sites available in areas	The Planning Authority shall implement the key principles of flood risk management set out in the Flood Risk Management Guidelines as follows:
		at lower risk that also meet the objectives of proper planning and sustainable development.	(a) Avoid development that will be at risk of flooding or that will increase the flooding risk elsewhere, where possible; (b) Substitute less vulnerable uses, where avoidance is not possible; and
		Vulnerable development in areas which have	(c) Mitigate and manage the risk, where avoidance and substitution are not possible.
		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	Development should only be permitted in areas at risk of flooding when there are no alternative, reasonable sites available in areas at lower risk that also meet the objectives of proper planning and sustainable development. Vulnerable development in areas which 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 which have lower flood risk
		not available in areas which have lower flood	FL 4 Flood Relief Schemes
		risk. TKT 50 Connections to the Public Sewer	The Planning Authority shall support and co-operate with the Office of Public Works (OPW) in the delivery of Flood Relief Schemes. FL 5 Catchment Planning
		& Public Water Mains	The Planning Authority will support the OPW'S CFRAM Programme and catchment-based Flood Planning Groups, especially where catchments go
		Development shall connect to the public sewer and public water mains, subject to a	beyond the Council's administrative boundary, in the development and implementation of catchment-based strategies for the management of flood risk - including those relating to storage and conveyance.
		connection agreement with Irish Water, in	FL 6 Surface Water Drainage and Sustainable Drainage Systems (SuDs)
		order to protect all waters in the plan area,	Maintain and enhance, as appropriate, the existing surface water drainage system in the County. Ensure that new developments are adequately
		and also to consolidate the urban structure and to control ribbon development along	serviced with surface water drainage infrastructure and promote the use of Sustainable Drainage Systems in all new developments. Surface water run-off from development sites will be limited to pre-development levels and planning applications for new developments will be required to provide
		approach roads into Tuam. TKT 51 Surface Water Drainage and	details of surface water drainage and sustainable drainage systems proposals. FL 7 Protection of Waterbodies and Watercourses
		Sustainable Drainage Systems (SuDs)	Protect waterbodies and watercourses within the County from inappropriate development, including rivers, streams, associated undeveloped riparian
		Maintain and enhance, as appropriate, the	strips, wetlands and natural floodplains. This will include protection buffers in riverine, wetland and coastal areas as appropriate.
		existing surface water drainage system in	FL 8 Flood Risk Assessment for Planning Applications and CFRAMS
		Tuam. Ensure that new developments are	Protect Flood Zone A and Flood Zone B from inappropriate development and direct developments/land uses into the appropriate Flood Zone in accordance with The Planning System and Flood Risk Management Guidelines for Planning Authorities 2009 (or any superseding document) and the
		adequately serviced with surface water drainage infrastructure and promote the use of Sustainable Drainage Systems in all new	guidance with the Planning System and Flood Risk Management Guidelines for Planning Authorities 2009 (or any superseding document) and the guidance contained in Development Management Standard 69. Site-specific Flood Risk Assessment (FRA) is required for all planning applications in areas at elevated risk of flooding, even for developments appropriate to the particular flood zone. The detail of these site-specific FRAs will depend
		developments. Surface water runoff from	on the level of risk and scale of development. A detailed site-specific FRA should quantify the risks, the effects of selected mitigation and the
		development sites will be limited to pre-	management of any residual risks. The Planning Authority shall have regard to the results of any CFRAM Studies in the assessment of planning
		development levels and planning applications for new developments will be required to	applications. Development proposal will need to be accompanied by a Development Management Justification Test in addition to the site-specific Flood Risk Assessment. Where only a small proportion of a site is at risk of flooding, the sequential approach shall be applied in site planning, in order
		provide details of surface water drainage and Sustainable Drainage Systems proposals. To	to seek to ensure that no encroachment onto or loss of the flood plain occurs and/or that only water compatible development such as Open Space would be permitted for the lands which are identified as being at risk of flooding within that site. In Flood Zone C, where the probability of flooding is
		maximise the capacity of existing collection systems for foul water, the discharge of	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.
		additional surface water to combined (foul	In addition to the County Plan SFRA datasets (including the Flood Zones, CFRAMS mapping, historical and predictive groundwater mapping, predictive
		and surface water) sewers is not permitted.	pluvial mapping and historical flood risk indicator mapping, such as the Benefitting Lands mapping), new and emerging datasets (such as the OPW's
		Refer also to Section 3.5 of the accompanying	National Fluvial Mapping that will supersede existing PFRA fluvial mapping for catchments greater than 5km2) must be consulted by prospective
		SFRA, "Sustainable Urban Drainage Systems and Surface Water Guidance and Strategy".	applicants for developments and will be made available to lower-tier Development Management processed in the Council. Applications for developments in coastal areas and associated assessments shall also consider wave overtopping and coastal erosion.
		TKT 52 Protection of Waterbodies and	uevelopments in coastal aleas and associated assessments shall also consider wave overtopping and coastal erosion.
		Watercourses	FL 9 SFRA of Lower Tier Plans
		Protect waterbodies and watercourses within	Lower tier plans shall undertake SFRA (Strategic Flood Risk Assessment) in compliance with the Flood Risk Management Guidelines.
		the County from inappropriate development,	FL 10 SFRA/FRA and Climate Change
		including rivers, streams, associated undeveloped riparian strips, wetlands and	SFRAs and site-specific FRAs 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

Topic	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including:	Existing Galway County Development Plan 2022-2028 measures, including:
	Ommugateu	natural floodplains. This will include protection	to this effect.
		buffers in the riverine, wetland and coastal	FL 11 FRA and Environmental Impact Assessment (EIA)
		areas as appropriate.	Flood risk may constitute a significant environmental effect of a development proposal that in certain circumstances may trigger a sub-threshold EIA.
		To contribute towards protection and	FRA should therefore be an integral part of any EIA undertaken for projects within the County.
		improvement of the status of surface and ground waters in accordance with the Water	FL 12 Inland Fisheries It is a policy objective of the Planning Authority to consult, where necessary, with Inland Fisheries Ireland, the National Parks and Wildlife Service and other relevant agencies in the construction of flood alleviation measures in County Galway.
		Framework Directive.	FL 13 CFRAM
		Applications for development under the Plan	It is a policy objective of the Planning Authority to take account of and incorporate into local planning policy and decision making, including possible
		must demonstrate that the proposal for	future variations to this plan, CFRAM measures that may be published in the future, including planned investment measures for managing and
		development would not adversely affect a	reducing flood risk.
		water body's ability to meet its objectives	FL 14 Flood Vulnerable Zones
		under the Water Framework Directive, individually as a result of the proposed	It is a policy objective of the Planning Authority to ensure that applications pertaining to existing developments in flood vulnerable zones provide details of structural and non-structural risk management measures to include, but not be limited to specifications of the following - floor levels,
		development or cumulatively, in combination	internal layout, flood resilient construction, flood resistant construction, emergency response planning, access and egress during flood events.
		with other developments.	FL 15 Flood Risk Management
		TKT 53 Flood Risk Assessment for	Ensure each flood risk management activity is examined to determine actions required to embed and provide for effective climate change adaptation
		Planning Applications and CFRAMS	as set out in the OPW Climate Change Sectoral Adaptation Plan for Flood Risk Management applicable at the time.
		Protect Flood Zone A and Flood Zone B from	FL 16 Benefitting Land
		inappropriate development and direct developments/land uses into the appropriate	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.
		Flood Zone in accordance with The Planning	FL 17 Consultation with OPW
		System and Flood Risk Management	Consult with the OPW in relation to proposed developments in the vicinity of drainage channels and rivers for which the OPW are responsible and
		Guidelines for Planning Authorities 2009 (or	retain a strip on either side of such channels where required, to facilitate maintenance access thereto. In addition, promote the sustainable
		any superseding document) and the guidance	management and uses of water bodies and avoid culverting or realignment of these features.
		contained in Development Management	FL 18 Inappropriate Development on Flood Zones
		Standards 2 and 3. Site-specific Flood Risk Assessment (FRA) is required for all planning	Where a development/land use is proposed within any area subject to this objective the development proposal will need to be accompanied by a detailed hydrological assessment and robust SUDS design which demonstrates the capacity to withstand potential flood events to maintain water
		applications in areas at elevated risk of	quality and avoid potential effects to ecological features.
		flooding, even for developments appropriate	Any development proposals should be considered with caution and will be required to comply with The Planning System and Flood Risk
		to the particular flood zone. The detail of	Management Guidelines for Planning Authorities/Circular PL2/2014 & the associated Development Management Justification Test.
		these site-specific FRAs will depend on the	Climate Change should be duly considered in any development proposal.
		level of risk and scale of development. A detailed site specific FRA should quantify the	• Protect the riparian zones of watercourse systems throughout the plan area through a general 10 metre protection buffer from rivers within the plan area as measured from the near riverbank, (this distance may be increased and decreased on a site by site basis, as appropriate).
		risks, the effects of selected mitigation and	• Any development proposals submitted for this site will require a detailed ecological report (s), carried out by suitably qualified personnel for the
		the management of any residual risks. The	purposes of informing Appropriate Assessment Screening by Galway County Council, the competent authority.
		Council shall have regard to the results of any	• The relevant lands will be outlined and flagged with a symbol on the land use zoning map and on the GIS system of Galway County Council so that
		CFRAM Studies in the assessment of planning	staff and the public are aware of the special conditions/constraints attached.
		applications. Where a development/land use	A briefing will be provided to relevant staff within Galway County Council on the special conditions and constraints on relevant lands.
		is proposed that is inappropriate within the Flood Zone, then the development proposal	
		will need to be accompanied by a	
		Development Management Justification Test	
		in addition to the site-specific Flood Risk	
		Assessment. 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.	
		TKT 54 Flood Risk Assessment and	
		Climate Change	
		Flood Risk Assessment in Tuam shall provide information on the implications of climate	
		change with regards to flood risk in relevant	
		locations. The 2009 OPW Draft Guidance on	

Topic	Potentially Significant	Local Area Plan measures, including:	Existing Galway County Development Plan 2022-2028 measures, including:
	Adverse Effect, if Unmitigated		
	- Ommergacea	Assessment of Potential Future Scenarios for	
		Flood Risk Management (or any superseding	
		document) shall be consulted with to this	
		effect. TKT 55 Flood Risk Assessment and	
		Environmental Impact Assessment (EIA)	
		Flood risk may constitute a significant	
		environmental effect of a development	
		proposal that in certain circumstances may	
		trigger a sub-threshold EIA. FRA should therefore be an integral part of any EIA	
		undertaken for projects within Tuam.	
		TKT 56 Flood Vulnerable Zones	
		It is a policy objective of the Council to ensure	
		that applications pertaining to existing	
		developments in flood vulnerable zones provide details of structural and non-structural	
		risk management measures to include, but	
		not be limited to specifications of the	
		following – floor levels, internal layout, flood	
		resilient construction, flood resistant	
		construction, emergency response planning, access and egress during flood events.	
		TKT 57 Flood Risk Management	
		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.	
Air and	Potential conflict	Strategic Aim	AQ 1 Ambient Air Quality
Climatic Factors	between development under the Plan and	Encourage the promotion of sustainable mobility, including walking and cycling, in	To promote the preservation of best ambient air quality compatible with sustainable development in accordance with the EU Ambient Air Quality and Cleaner Air for Europe (CAFÉ) Directive (2008/50/EC) and ensure that all air emissions associated with new developments are within Environmental
ractors	aiming to reduce	accordance with the aspirations of the Local	Quality Standards as set out in the Air Quality Standards Regulations 2011 (SI No. 180 of 2011) (or any updated/superseding documents).
	carbon emissions in	Transport Plan and support the continued	AQ 2 Assessment of Air Quality
	line with local,	provision of investment in public transport.	To require developments which would have the potential to have adverse impacts on air quality to carry out assessments of the impact of the
	national and	TKT 10 Town Centre Management	development on air quality.
	European environmental	Subject to appropriate resources, the Council in collaboration with stakeholders, shall	AQ 3 Air Quality Mitigation Measures To require the use of appropriate mitigation measures such as dust dampeners to minimise the potential impacts of developments on air quality.
	objectives.	prepare a town centre management plan for	AQ 4 Air Purification
	 Potential conflicts 	Tuam. The management plan will consider	Galway County Council shall encourage landscaping and deciduous tree planting in an environmentally sensitive manner within towns and villages as
	between transport	some or all of the following:	a means of air purification, the filtering of suspended particles and the improvement of their micro-climate.
	emissions, including	a) The feasibility of a Town Centre market;	AQ 5 Radon
	those from cars, and air quality.	 b) Upgrade of public lighting and tidying of wirescapes in the Town Centre; 	Galway County Council shall have regard, to the specific guidance on radon prevention measures for new homes as contained within the existing Building Regulations (including any updated/superseding Regulations that may be published within the lifetime of this Development Plan).
	Potential conflicts	c) Connectivity of the Town Centre including	NP 1 Galway County Council Noise Action Plan 2019-2023
	between increased	upgrading of paving, consideration of	To implement the Galway County Council Noise Action Plan 2019-2023 (and any subsequent Plan) in order to avoid, prevent and reduce the harmful
	frequency of noise	feasibility of identified pedestrianised lanes	effects, including annoyance, due to environmental noise exposure.
	emissions and	and routes through the Town;	NP 2 Developments within Noise Maps (Noise Action Plan 2019-2023)
	protection of sensitive receptors.	 d) Scheme for façade improvement on identified priority streetscapes; 	To require that where new developments are proposed within the noise limits of the noise maps for the designated sections of roads in the County, appropriate mitigation measures are undertaken so as to prevent harmful effects from environmental noise.
	Potential conflicts with	e) Upgrade and improvement of street	NP3 Noise Impact Assessments
	climate adaptation	furniture;	To require an assessment of impact of the development on noise levels, having regard to the provisions of the Environmental Protection Agency Acts
	measures including	f) A co-ordinated vehicular access	1992 and 2003 and the EPA Noise Regulations 1994 when assessing planning application.
	those relating to flood	arrangement, which shall be in consultation	

Topic	Potentially Significant	Local Area Plan measures, including:	Existing Galway County Development Plan 2022-2028 measures, including:
. op.c	Adverse Effect, if		
	Unmitigated		
	risk management.	and agreement with the Road Design Section	NP 4 Noise Pollution and Regulation
		of Galway County Council;	Restrict development proposals causing noise pollution in excess of best practice standards and regulate and control activities likely to give rise to
		g) Consistent sustained signage design policy	excessive noise, other than those activities which are regulated by the EPA
		within the Town Centre;	NP 5 Noise Mitigation Measures
		h) Provision of appropriate quality landscaping	Require activities likely to give rise to excessive noise to install noise mitigation measures and monitors. The provision of a noise audit may be
		and functional public spaces;	required where appropriate. CC 1 Climate Change
		i) Provide footpath and cycling links to the Town Centre; and,	Support and facilitate the implementation of European, National and Regional objectives for climate adaptation and mitigation taking into account
		j) Car parking management.	other provisions of the Plan (including those relating to land use planning, energy, sustainable mobility, flood risk management and drainage) and
		TKT 35 Local Transport Plan	having regard to the Climate mitigation and adaptation measures.
		Support the implementation of the Local	CC 2 Transition to a low carbon, climate-resilient society
		Transport Plan as set out in Section 3 in	It is a policy objective of the Planning Authority to support the transition to a competitive, low carbon, climate-resilient and environmentally
		accordance with proper planning and	sustainable economy by 2050, by way of reducing greenhouse gases, increasing renewable energy, and improving energy efficiency.
		sustainable development ⁵² .	CC 3 County Galway Climate Adaptation Strategy 2019-2024
		Additional Mitigation in relation to	To implement the County Galway Climate Adaptation Strategy 2019-2024 as appropriate.
		Policy Objective TKT 35:	CC 4 Local Authority Climate Action Plan
		Ensure that new transport infrastructure,	Support the preparation of a Climate Action Plan for County Galway.
		including cycling and walking infrastructure	CC 5 Climate Adaptation and Mitigation
		and multi-modal hubs, are subject to the	To promote, support and direct effective climate action policies and objectives that seek to improve climate outcomes across County Galway through
		following, as appropriate:	the encouragement and integration of appropriate mitigation and adaptation considerations and measures into all development and decision-making
		As outlined in the Galway County	processes.
		Development Plan Policy	CC 6 Local Authority Renewable Energy Strategy (LARES)
		Objective PRP 2; and	To support the implementation of the Renewable Energy Strategy contained in Appendix 1 of the Galway County Development Plan to facilitate the
		Environmental constraints, including those related to	transition to a low carbon county. CC 7 Climate Action Fund
		including those related to habitats and potential impacts,	Support the delivery of sustainable development projects under the European Green Deal and utilise the Climate Action Fund/ Just Transition Fund
		such as disturbance from	established under the National Development Plan to encourage public and private climate mitigation and adaptation projects in line with criteria set
		lighting. This will include	out by the Fund at that time.
		minimising river crossings,	CC 8 Climate Action and Development Location
		avoiding sensitive habitats, not	To implement, through the plan and future local areas plans, policies that support and encourage sustainable compact growth and settlement
		increasing barriers to flood	patterns, integrate land use and transportation, and maximise opportunities through development location, form, layout and design to secure climate
		waters and sustainable design	resilience and reduce carbon dioxide and greenhouse emissions.
		and construction techniques.	CC 9 Mainstreaming Climate Change Adaptation
		To reallocate corresponding road space to	Galway County Council shall incorporate climate change adaptation into land use planning, building layouts, energy, transport, natural resource
		walking, cycling and public transport to	management, forestry, agriculture and marine waters.
		accompany / occur concurrently with the	CC 10 Green Infrastructure
1		provision of additional road space capacity.	Galway County Council shall promote the benefit of open spaces and implement the integration of green infrastructure/networks (e.g., interconnected
1		TKT 36 Transport Infrastructure	network of green spaces (including aquatic ecosystems) and other physical features on land) into new development and regeneration proposals in
		Facilitate the provision and maintenance of	order to mitigate and adapt to climate change.
		essential transportation infrastructure. This shall include the reservation of lands to	
		facilitate public roads, footpaths, cycleways,	
		bus stops and landscaping together with any	
		necessary associated works, as appropriate.	
		TKT 38 Sustainable Transportation	
		Facilitate any Smarter Travel initiatives that	
		will improve sustainable transportation within	
1		the plan area and facilitate sustainable	
		transportation options including public	
		transportation, rail freight, electric vehicles,	
		car clubs, public bike schemes, cycle parking	
		as appropriate.	

⁵² Including complying with the measures outlined in relation to this Policy Objective in Table 9.1 of the SEA Environmental Report and Table 5.1 of the AA Natura Impact Report. CAAS for Galway County Council

Topic	Potentially Significant		onmental Report for the Tuam Local Area Plan 2023-2029 Existing Galway County Development Plan 2022-2028 measures, including:
Торіс	Adverse Effect, if	Local Area Fian measures, including.	Existing Galway County Development Fian 2022-2026 measures, including.
	Unmitigated		
	-	TKT 39 Pedestrian and Cycle Network	
		Facilitate the improvement of the pedestrian	
		and cycling environment and network so that	
		it is safe and accessible to all, through the	
		provision of the necessary infrastructure. New	
		development shall promote and prioritise	
		walking and cycling, shall be permeable,	
		adequately linked and connected to	
		neighbouring areas, the town centre,	
		recreational, educational, residential and	
		employment destinations and shall adhere to	
		the principles contained within the national policy document Smarter Travel – A	
		Sustainable Transport Future 2009-2020 and	
		the Design Manual for Urban Roads and	
		Streets (2013), as updated in 2019 and NTA	
		document Permeability: Best Practice Guide.	
		TKT 40 Traffic and Transport	
		Assessment (TTA) and Road Safety	
		Audits	
		Require all significant development proposals	
		to be accompanied by a Road Safety Audit	
		and Traffic and Transport Assessment carried	
		out by suitably competent consultants, which	
		are assessed in association with their	
		cumulative impact with neighbouring	
		developments on the road network, in accordance with the requirements contained	
		in TII's Traffic and Transport Assessment	
		Guidelines (PE-PDU-02045) 2014 (including	
		any updated/superseding document) and	
		'Road Safety Audit' (GE-STY-01024)	
		December 2017.	
		TKT 44 Climate Change	
		To implement, through this Local Area Plan,	
		policy objectives that support and encourage	
		sustainable compact growth and settlement	
		patterns, integrate land use and	
		transportation and maximise opportunities	
		through development location, form, layout and design to secure climate resilience and	
		reduce carbon dioxide and greenhouse	
		emissions.	
		TKT 37 Noise	
		Require all new proposed development, which	
		is considered to be noise sensitive within	
		300m of existing, new or planned national	
		roads, or roadways with traffic volumes	
		greater than 8,220 Annual Average Daily	
		Traffic (AADT), to include a noise assessment	
		and mitigation measures if necessary with	
		their planning application documentation. The	
		cost of mitigation measures shall be borne by the developer. Mitigation measures in order to	
		protect the noise environment of Residential	
		Existing development will be facilitated or	
		Existing acrelopinent will be racilitated of	

Topic	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including:	Existing Galway County Development Plan 2022-2028 measures, including:
		enforced as necessary.	
Material Assets	Failure to provide adequate and appropriate whether the provide and appropriate and appro	Also refer to measures under other environmental components including Population and Human Health, Cultural	Also refer to measures under other environmental components including Population and Human Health, Cultural Heritage, Soil, Water, Air, various Land Use and Phasing provisions. RH 11 Waste Water Treatment provision
	appropriate waste water treatment (water services	Heritage, Soil, Water, Air, various Land Use and Phasing provisions.	Provide for sustainable rural housing in the county in accordance with the EPA Code of Practice: Wastewater Treatment Systems for Single Houses (2009).
	infrastructure and capacity ensures the mitigation of potential conflicts).	Strategic Aims Tuam is strategically located as a centre for growth in North Connaught, it has excellent connections to the motorway route from	AD4 Agriculture Waste To ensure agricultural waste is managed and disposed of in a safe, efficient and sustainable manner having regard to the environment and in full compliance with the European Communities Good Agricultural Practice for the Protection of Waters Regulations (2014) and relevant best practice quidelines.
	Failure to adequately treat surface water run-off that is	Limerick to Sligo as well as motorway linkages to Galway and Dublin. It has the opportunity to develop as the focus for future	WS 1 Enhancement of Water Supply Infrastructure Liaise with Irish Water, to maximise the potential of existing capacity and to facilitate the timely delivery of new water services infrastructure, to facilitate existing and future growth.
	discharged to water bodies (water services infrastructure and capacity ensures the	development in North Connaught providing the infrastructure and services for its surrounding small towns/villages and rural lands.	Collaborate with Irish Water and the Group Water Federation Scheme to protect, conserve and enhance all existing and potential water resources in the County to ensure compliance with the European Union (Drinking Water) Regulations 2014 (as amended) and compliance of water supplies with the parameters identified in these Regulations.
	mitigation of potential conflicts). • Failure to comply with drinking water	Promote future residential development in Tuam with sustainable, liveable and safe neighbourhoods supported by good quality services and infrastructure as appropriate,	WS 3 River Basin Management Plan for Ireland 2018-2021 Support the implementation of the relevant recommendations and measures as outlined in the relevant River Basin Management Plan 2018-2021, and associated Programme of Measures, or any such plan that may supersede same during the lifetime of this plan. WS 4 Requirement to Liaise with Irish Water – Water Supply
	regulations and serve new development with adequate	including social infrastructure with retail, community and amenity areas. Recognises the town's potential as an	Ensure that new developments are adequately serviced with a suitable quantity and quality of drinking water supply and require that all new developments intending to connect to a public water supply liaise with Irish Water with regard to the water (and wastewater) infrastructure required. WS 5 Private Water Supply
	drinking water (water services infrastructure and capacity ensures the mitigation of potential conflicts).	attractive place for people and locals to enjoy by promoting local amenities such as St. Joseph's Park, Tuam Stadium, local sporting facilities such as a rugby club, GAA club and football clubs and Leisure Centre.	Support the provision of a private water supply in instances where there is no public water supply or where the existing supply does not have sufficient capacity to serve the proposed development. This will only be considered where it can be demonstrated that the proposed water supply meets the standards set out in the EU and national legislation and guidance including adherence to Article 6 of the EU Habitats Directive, and would not be prejudicial to public health or would not significantly impact negatively on the source or yield of an existing supply. WS 6 Water Framework Directive
	Increases in waste levels.Potential impacts	TKT 21 Public Utilities Facilitate the provision and maintenance of essential public utility infrastructure, together	Support the preparation of Drinking Water Safety Plans and Source Protection Plans to protect sources of public water supply, in accordance with the requirements of the Water Framework Directive. WS 7 Water Quality
	upon public assets and infrastructure. • Interactions between	with the necessary ancillary facilities and uses, as appropriate. Development proposals in the vicinity of public utilities infrastructure	Require that new development proposals would ensure that there would not be an unacceptable impact on water quality and quantity including surface water, ground water, designated source protection areas, river corridors and associated wetlands. WS 8 Proliferation of Septic Tanks
	agricultural waste and soil, water, biodiversity and	will be assessed on a case-by-case basis in accordance with proper planning and sustainable development.	Encourage the use of high standard treatment plants to minimise the risk of groundwater pollution. CWS 1 Water Conservation with all Developments To ensure all developments incorporate water conservation measures such as rainwater harvesting to minimise wastage of water supply.
	human health – including as a result of emissions of	TKT 22 Water Supply, Wastewater and Combined Drainage Infrastructure Support Irish Water in the provision and	CWS 2 Water Mains Rehabilitation To assist Irish Water in their commitment to water conservation and support efforts to tackle leakage through find and fix (active leakage control) and water mains rehabilitation.
	ammonia from agricultural activities	maintenance adequate wastewater disposal and water supply and the maintenance of	CWS 3 Promotion of Water Conservation To support Irish Water in promoting public awareness and involvement in water conservation measures by households, business and industry.
	(e.g. manure handling, storage and spreading) and the	existing combined (sewage and surface water) drainage infrastructure, in accordance with EU Directives, to service Tuam. This will	WW 1 Enhancement of Wastewater Supply Infrastructure Work in conjunction with Irish Water to maximise the potential of existing capacity and to facilitate the delivery of new wastewater services infrastructure, to facilitate future growth in the county.
	production of secondary inorganic particulate matter.	include satisfactory capacity for public wastewater and a satisfactory quantity and quality of water supply, Sustainable Drainage System approaches and techniques within the	WW 2 Delivery of Wastewater Infrastructure "Liaise and co-operate with Irish Water in the implementation and delivery of the Water Services Strategic Plan (2015) and the Irish Water Investment Plan 2020-2024 and other relevant investment works programmes of Irish Water in the delivery of infrastructure within the county. WW 3 The Greater Galway Area Strategic Drainage Study
		plan area shall also be supported. The removal of surface water from combined drainage infrastructure is strongly encouraged	To seek to accelerate and support the delivery of the Greater Galway Area Strategic Drainage Study and the associated solutions as identified in the RSES as an essential infrastructure requirement in conjunction with the Department of the Environment, Climate and Communications, Irish Water and Galway City Council.
		in order to free up capacity for future development.	WW 4 Requirement to Liaise with Irish Water – Wastewater Ensure that new developments will only be permitted which are adequately serviced with sufficient capacity for appropriate collection, treatment and disposal (in compliance with the Water Framework Directive and River Basin Management Plan) to the public sewer unless provided for otherwise by

Topic	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including:	Existing Galway County Development Plan 2022-2028 measures, including:
	-	TKT 23 Water Supply and Water Conservation	the plan. Developers shall liaise with Irish Water with regard to the wastewater (and water) infrastructure to ensure sufficient capacity is available prior to the submission of a planning application. "
		Ensure that new developments are adequately serviced with a suitable quantity and quality of drinking water supply, promote water	WW 5 Serviced Sites Support the servicing of small towns and villages including initiatives to provide an alternative to one-off housing in the countryside, in accordance with the National Planning Framework.
		conservation to reduce the overall level of	WW 6 Private Wastewater Treatment Plants
		water loss in the public supply and require that new domestic developments provide for	Ensure that private wastewater treatment plants, where permitted, are operated in compliance with Environmental Protection Agency (EPA) Code of Practice for Domestic Waste Water Treatment System 2021 (Population Equivalent ≤10).
		water supply metering in accordance with their connection agreement with Uisce	WW 7 Sustainable Drainage Systems To require the use of Sustainable Drainage Systems to minimise and limit the extent of hard surfacing and paving and require the use of SuDS
		Éireann. TKT 35 Local Transport Plan Support the implementation of the Local	measures be incorporated in all new development (including extensions to existing developments). All development proposals shall be accompanied by a comprehensive SuDS assessment including run-off quantity, run off quality and impacts on habitat and water quality. WW 8 Storm Water Infrastructure
		Support the implementation of the Local Transport Plan as set out in Section 3 in accordance with proper planning and	To support the improvement of storm water infrastructure and to increase the use of sustainable drainage and reduce the risk of flooding in urban environments.
		sustainable development ⁵³ . Additional Mitigation in relation to	WW 9 Integrated Wetland Wastewater Treatment Systems Galway County Council will encourage the use of integrated wetland wastewater treatment systems for both one off and multi-unit housing
		Policy Objective TKT 35: Ensure that new transport infrastructure,	developments that accord with the prevailing regulations and standards including the relevant EPA Code of Practice. WW10 Surface Water Drainage
		including cycling and walking infrastructure and multi-modal hubs, are subject to the	To require all new developments to provide a separate foul and surface water drainage system and to incorporate sustainable urban drainage systems where appropriate in new development and the public realm.
		following, as appropriate:	WW11 Protection of Irish Water Collection Systems
		As outlined in the Galway County Development Plan Policy	To prohibit the discharge of additional surface water to combined (foul and surface water) sewers in order to maximise the capacity of existing collection systems for foul water.
		Objective PRP 2; and Environmental constraints, including those related to	WM 1 Connacht and Ulster Waste Management Plan 2015-2021 Support the implementation of the Connacht and Ulster Waste Management Plan 2015-2021 or any updated version of this document within the lifetime of the plan.
		habitats and potential impacts,	WM 2 Requirements for Waste Management
		such as disturbance from	Support and promote the circular economy principles, prioritising prevention, reuse, recycling and
		lighting. This will include minimising river crossings, avoiding sensitive habitats, not	recovery, and to sustainably manage residual waste. New developments will be expected to take account of the provisions of the Waste Management Plan for the Region and observe those elements of it that relate to waste prevention and minimisation, waste recycling facilities, and the capacity for source segregation.
		increasing barriers to flood	WM 3 Waste Recovery and Disposal Facilities
		waters and sustainable design	Support and facilitate the provision of adequate waste recovery and disposal facilities for the County.
		and construction techniques.	WM 4 Waste Legalisation
		To reallocate corresponding road space to walking, cycling and public transport to	To require that all waste disposal shall be undertaken in compliance with the requirements of the Environmental Protection Agency and relevant Waste Management Legislation.
		accompany / occur concurrently with the provision of additional road space capacity.	
		TKT 36 Transport Infrastructure	
		Facilitate the provision and maintenance of	
		essential transportation infrastructure. This shall include the reservation of lands to	
		facilitate public roads, footpaths, cycleways,	
		bus stops and landscaping together with any	
		necessary associated works, as appropriate.	
		TKT 38 Sustainable Transportation	
		Facilitate any Smarter Travel initiatives that will improve sustainable transportation within	
		the plan area and facilitate sustainable	
		transportation options including public	
		transportation, rail freight, electric vehicles,	

⁵³ Including complying with the measures outlined in relation to this Policy Objective in Table 9.1 of the SEA Environmental Report and Table 5.1 of the AA Natura Impact Report. CAAS for Galway County Council

Topic	Potentially Significant		Existing Galway County Development Plan 2022-2028 measures, including:
	Adverse Effect, if		
	Unmitigated		
		car clubs, public bike schemes, cycle parking	
		as appropriate.	
		TKT 39 Pedestrian and Cycle Network	
		Facilitate the improvement of the pedestrian	
		and cycling environment and network so that	
		it is safe and accessible to all, through the	
		provision of the necessary infrastructure. New	
		development shall promote and prioritise	
		walking and cycling, shall be permeable, adequately linked and connected to	
		neighbouring areas, the town centre,	
		recreational, educational, residential and employment destinations and shall adhere to	
		the principles contained within the national	
		policy document Smarter Travel – A	
		Sustainable Transport Future 2009-2020 and	
		the Design Manual for Urban Roads and	
		Streets (2013), as updated in 2019 and NTA	
		document Permeability: Best Practice Guide.	
		TKT 40 Traffic and Transport	
		Assessment (TTA) and Road Safety	
		Audits	
		Require all significant development proposals	
		to be accompanied by a Road Safety Audit	
		and Traffic and Transport Assessment carried	
		out by suitably competent consultants, which	
		are assessed in association with their	
		cumulative impact with neighbouring	
		developments on the road network, in	
		accordance with the requirements contained	
		in TII's Traffic and Transport Assessment	
		Guidelines (PE-PDU-02045) 2014 (including	
		any updated/superseding document) and	
		'Road Safety Audit' (GE-STY-01024)	
		December 2017.	
		TKT 41 Preservation of Routes, Road	
		Upgrades and Infrastructure Provision	
		Prohibit development on lands which are	
		reserved for proposed road/street corridors	
		and associated buffers and where	
		development would affect a route, line, level	
		or layout of any proposed new roadway.	
		TKT 50 Connections to the Public Sewer	
		& Public Water Mains	
		Development shall connect to the public	
		sewer and public water mains, subject to a	
		connection agreement with Irish Water, in	
		order to protect all waters in the plan area,	
		and also to consolidate the urban structure and to control ribbon development along	
1		approach roads into Tuam.	

Topic	Potentially Significant	Local Area Plan measures, including:	onmental Report for the Tuam Local Area Plan 2023-2029 Existing Galway County Development Plan 2022-2028 measures, including:
Торіс	Adverse Effect, if	Local Area Flatt measures, including:	Existing Galway County Development Plan 2022-2026 measures, including.
Cultural Heritage		Strategic Aim Promoting and facilitating the appropriate growth of the Town, while protecting the built, cultural and natural heritage of Tuam in accordance with applicable legislation and policy. This also includes consideration of particular features of Tuam capitalising on the existing historic fabric of the town. Supporting development in Tuam in a sensitive manner which conserves and protects the historic core, recognising the towns cultural and historic built environment as a valuable asset. TKT 19 Tourism Development Encourage and assist in the development of the sustainable tourism potential within Tuam in a manner that respects, builds on, protects and enhances the cultural, built, architectural, archaeological and heritage significance of the town including natural heritage and biodiversity and its local amenities. TKT 24 Archaeological Heritage a) Ensure the protection and sympathetic enhancement of archaeological heritage in the Plan Area, in particular by implementing the relevant provisions of the Planning and Development Act 2000 (as amended), and the Archaeology and Development: Guidelines for Good Practice for Developers. b) Ensure that any development in the immediate vicinity of a National Monument and a Recorded Monument is sensitively designed and sited and does not detract from the Recorded Monument or its visual amenity. TKT 27 Architectural Heritage Ensure the protection and conservation of the architectural heritage in the Plan area in particular by implementing the relevant legislative provisions of the Planning and Development Act 2000 (as amended) in relation to architectural heritage and policy guidance contained within the Architectural Heritage and the Gaeltacht and National Disability Authority's advice series titled Access: Improving the Accessibility to Historic Buildings and Places 2011 (or any superseding document). Policy Objective AH2	AH 1 Architectural Heritage Ensure the protection of the architectural heritage of County Galway, which is a unique and special resource, having regard to the policy guidance contained in the Architectural Heritage Protection Guidelines 2011 (and any updated/superseding document). AH 2 Protected Structures (ReFe to Appendix 6) (a) Ensure the protection and sympathetic enhancement of structures including their curtilage and attendant grounds included and proposed for inclusion in the Record of Protected Structures (RPS) that are of special importance in the County during the lifetier of the plan. (c) Ensure that development proposals are appropriate in terms of architectural treatment, character, scale and form to the existing protected structures and otterimental to the special character and integrity of the protected structures (in the County during the lifetier of the plan. (c) Ensure that development proposals are appropriate in terms of architectural treatment, character, scale and form to the existing protected structure and not deterimental to the special character and integrity of the protected structure and its setting, (d) Ensure high quality architectural design of all new developments relating to or which may impact on structures (and their settings) included in the Record of Protected Structures. (e) Promote and ensure best conservation practice through the use of specialist conservation professionals and craft persons. (f) Prohibit development proposals, either in whole or in part, for the demolition of protected structures, save in exceptional circumstances. AH 3 Protection of Structure on the NIAH Give regard to and consideration of all structures which are included in the NIAH for County Galway, which are not currently included in the Record of Protected Structures, indevelopment management functions. AH 4 Architectural Conservation Areas (Refer to Appendix 7) Protect, conservation and consideration of all structures which are and contributes to the character of the particular management and
		Protected Structures' (refer to current County Development Plan) ensures the protection and sympathetic enhancement of structures included on the Record of Protected Structures (RPS) that are of special	AH 8 Energy Efficiency and Traditionally Built Structures Ensure that measures to upgrade the energy efficiency of protected structures and traditionally built historic structures are sensitive to traditional construction methods, employ best practice and use appropriate materials and methods that will not have a detrimental impact on the material, functioning or character of the building. AH 9 Local Landscape and Place Assessment
		architectural, historical, archaeological, artistic, cultural, scientific, social or technical	To support proposals from local communities including Tidy Town Committees, Chambers of Commerce and residents' groups in analysing the character of their place and promoting its regeneration for their own use and enjoyment and that of visitors to the area.

Topic	Potentially Significant	Local Area Plan measures, including:	Existing Galway County Development Plan 2022-2028 measures, including:
	Adverse Effect, if Unmitigated		
		interest, together with the integrity of their	AH 10 Designed Landscapes
		character and setting. TKT 29 Architectural Conservation Area	Protect the surviving historic designed landscapes in the County and promote the conservation of their essential character, both built and natural. Consider protection of the designed landscape by inclusion in an Architectural Conservation Area. Development proposals in designed landscape shall
		Protect, conserve and enhance the essential	be accompanied by an appraisal of the contributing elements and an impact assessment.
		character of the Tuam Architectural	AH 11 Custodianship
		Conservation Area, through respecting the	Promote an inter-disciplinary approach demonstrating best practice with regard to the custodianship of protected structures, recorded monuments
		surviving historic plots and street patterns and through the appropriate management and	and elements of built heritage. AH 12 Placemaking for Towns and villages
		control of the design, location and layout of	Promote the value of placemaking in cooperation with communities in their towns, villages and local areas.
		new development, alterations or extensions to	AH 13 Traditional Building Skills
		existing structures, and/or modifications to	Support and promote traditional building skills, training and awareness of the use of appropriate materials and skills within the Local Authority,
		the setting of the structure and the character of the Architectural Conservation Area. The	community groups, owners and occupiers of traditionally built structures. AH 14 Design and Landscaping in New Buildings
		identification of areas of special interest	Encourage new buildings that foster an innovative approach to design and acknowledges the diversity of suitable design solutions in appropriate
		within the Plan boundary may be considered	locations while promoting the added economic, amenity and environmental value of good design.
		during the lifetime of the Plan.	ARC 1 Legislative Context
			Support and promote the preservation, conservation and appropriate management and enhancement of the County's archaeological sites and monuments, together with the settings of these monuments, having regard to the legislative, statutory and policy provisions relevant to the
			conservation of the archaeological heritage.
			ARC 2 Archaeological Sites
			Seek to encourage and promote awareness of and access to archaeological heritage of the County for all, through the provision of information to landowners and the community generally, in co-operation with statutory and other partners.
			ARC 3 Archaeological Landscapes
			To facilitate where possible the identification of important archaeological landscapes in the County
			ARC 4 Protection of Archaeological Sites All planning applications for new development, redevelopment, any ground works, refurbishment, and
			restoration, etc. within areas of archaeological potential or within close proximity to Recorded Monuments or within the historic towns of County Galway will take account of the archaeological heritage of the area and the need for archaeological mitigation.
			ARC 6 Burial Grounds
			Protect the burial grounds, identified in the Record of Monuments and Places, in co-operation with the National Monuments Service of the
			Department of Housing, Local Government and Heritage. Encourage the local community to manage burial grounds in accordance with best conservation and heritage principles.
			ARC 7 Battlefield Sites
			Protect the Battle of Aughrim site and other battlefield sites and their settings.
			ARC 8 Underwater Archaeological Sites
			To protect and preserve the archaeological value of underwater archaeological sites and associated features. In assessing proposals for development, the Council will take account of the potential underwater archaeology of rivers, lakes, intertidal and sub—tidal locations.
			ARC 9 Recorded Monuments
			Ensure that any development in the immediate vicinity of a Recorded Monument is sensitively designed and sited and does not detract from the
			monument or its visual amenity. ARC 10 Zones of Archaeological Potential
			To protect the Zones of Archaeological Potential located within both urban and rural areas and around archaeological monuments generally as
			identified in the Record of Monuments and Places. Any development within the ZAPs will need to take cognisance of the potential for subsurface
			archaeology and if archaeology is demonstrated to be present appropriate mitigation (such as preservation in situ/buffer zones) will be required.
			ARC 11 Industrial and Post Medieval Archaeology Protect and preserve the archaeological value of industrial and post medieval archaeology such as mills, limekilns, bridges, piers, harbours, penal
			chapels and dwellings. Proposals for refurbishment, works to or redevelopment/conversion of these sites should be subject to careful assessment.
			ARC 12 Archaeology and Infrastructure Schemes
			Have regard to archaeological concerns when considering proposed service schemes (including electricity, sewerage, telecommunications, water supply) and proposed roadwork's (both realignments and new roads) located in close proximity to Recorded Monuments and Places and their known
			archaeological monuments.
			CUH 1 Cultural heritage
			Protect and promote the cultural heritage assets and the intangible cultural heritage assets of County Galway as important social and economic
			assets. CUH 2 Special Places of Historic Interest
			To protect and promote where possible special places of historical interest.
			CUH 3 Placenames/Naming of New Developments

Topic	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including:	Existing Galway County Development Plan 2022-2028 measures, including:
Landscape	Occurrence of adverse visual impacts and conflicts with the	Also refer to measures under Biodiversity and Flora and Fauna and Cultural Heritage TKT 25 High Quality, Contextually	Promote and preserve local place names, local heritage and the Irish language by ensuring the use of local place names or geographical or cultural names which reflect the history and landscape of their settings in the naming of new residential and other developments. All names will be in the Irish language only. The naming and numbering schemes including associated signage must be submitted to the Planning Authority prior to the commencement of a new development. CUH 4 The Gaeltacht and Linguistic Heritage (a) To protect the linguistic and cultural heritage of the Gaeltacht and to promote Irish as a community language. To promote and facilitate the sustainable development of An Ghaeltacht and Island communities in County Galway. (b) To support organisations involved in the continued promotion and preservation of the Irish language and culture. To work in a positive and encouraging way to create and maintain a bilingual environment in the County, and to ensure the availability of opportunities for the use of spoken and written Irish. CUH 5 Library and Archives (a) To facilitate the development and implementation of Galway Library Development Programme 2016-2021 or subsequent programme and support the development and promotion of the library network in the county. (b) Galway County Council shall support the provision of a purpose built repository, meeting international archival standards, to house, and ensure the preservation, of this important heritage resource. Also refer to measures under Biodiversity and Flora and Fauna and Cultural Heritage. Policy Objectives Landscape Conservation and Management LCM 1 Preservation of Landscape Character
	appropriate protection of designations relating to the landscape.	Sensitive Design Ensure that new developments are responsive to their site context and in keeping with the character, heritage, amenity, environment and landscape of the area. New development proposals will be required to complement the existing character of the area in terms of scale, height, massing, building line, urban grain and definition and through high quality design proposals for buildings/structures/shop fronts, the use of high quality, appropriate materials and the provision of appropriate signage, lighting, landscaping proposals and other such details.	Preserve and enhance the character of the landscape where, and to the extent that, in the opinion of the Planning Authority, the proper planning and sustainable development of the area requires it, including the preservation and enhancement, where possible of views and prospects and the amenities of places and features of natural beauty or interest. LCM 2 Landscape Sensitivity Classification The Planning Authority shall have regard to the landscape sensitivity classification of sites in the consideration of any significant development proposals and, where necessary, require a Landscape/Visual Impact Assessment to accompany such proposals. This shall be balanced against the need to develop key strategic infrastructure to meet the strategic aims of the plan. LCM 3 Landscape Sensitivity Ratings Consideration of landscape sensitivity ratings shall be an important factor in determining development uses in areas of the County. In areas of high landscape sensitivity, the design and the choice of location of proposed development in the landscape will also be critical considerations. LCM 4 Open/Unfenced Landscape Preserve the status of traditionally open/unfenced landscape. The merits of each case will be considered in light of landscape sensitivity ratings and views of amenity importance. PVSR 1 – Protected Views and Scenic Routes Preserve the protected views and scenic routes as detailed in Maps 8.3 and 8.4 from development that in the view of the Planning Authority would negatively impact on said protected views and scenic routes. This shall be balanced against the need to develop key infrastructure to meet the strategic aims of the plan. TWHS 1 Tentative World Heritage Sites. Protect the Outstanding Universal Value of the tentative World Heritage Sites in County Galway namely the Western Stone Forts and the Burren that are included in the UNESCO Tentative List and engage with other national and international initiatives which promote the special built, natural and cultural heritage of places in the County.

Section 10 Monitoring Measures

10.1 Introduction

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

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

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

10.2 Indicators and Targets

Monitoring is based around indicators which allow quantitative measures of trends and progress over time relating to the Strategic Environmental Objectives identified in Section 5 and used in the evaluation. Each indicator to be monitored is accompanied by the target(s) which were identified with regard to the relevant strategic actions. Given the position of the Local Area Plan in the land use planning beneath hierarchy the Galway 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 Western and Northern RSES and the Galway 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 (including monitoring databases those maintained planning authorities by national/regional government departments and agencies) and the output of lower-tier environmental assessment and making (including a review of project approvals granted and associated documents and the output of any EIA monitoring programmes).

Internal monitoring of the environmental effects of grants of permission in the Council would provide monitoring of certain indicators on a *grant of permission*⁵⁴ 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.

⁵⁴ 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. This report should address the indicators set out on Table 10.1.

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

The 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.

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.

		ors, Targets, Sources and Ren		T -	
Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action
Biodiversity, Flora and Fauna	BFF	Condition of European sites	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 Implement and review, as relevant, County Galway Heritage and Biodiversity Plan 2017-2022	DHLGH report of the implementation of the measures contained in the Habitats Directive - as required by Article 17 of the Directive (every 6 years). DHLGH National Birds Directive Monitoring Report for the under Article 12 (every 6 years) Consultations with the NPWS (see Section 10.4)	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.
		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	 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 Implement and review, as relevant, County Galway Heritage and Biodiversity Plan 2017-2022 	Internal review of local land use plans	Review internal systems
		SEAs and AAs as relevant for new Council policies, plans, programmes etc. Status of water quality in the	Screen for and undertake SEA and AA as relevant for new Council policies, plans, programmes etc. Included under Water below	Internal monitoring of preparation of local land use plans Included under Water below	Review internal systems Included under Water below
		County's water bodies	Included dilder Water below	• Included under water below	Included under water below
		Compliance of planning permissions with Plan measures providing for the protection of Biodiversity and flora and fauna – see County Development Plan Chapter 10 "Natural Heritage, Biodiversity and Green Infrastructure"	 For planning permission to be only granted when applications demonstrate that they comply with all Plan measures providing for the protection of biodiversity and flora and fauna – see County Development Plan Chapter 10 "Natural Heritage, Biodiversity and Green Infrastructure" 	• Internal monitoring of likely significant environmental effects of grants of permission ⁵⁶	Review internal systems
Population and Human Health	РНН	Implementation of Plan measures relating to the promotion of economic growth as provided for by County Development Plan Chapter 5 "Economic, Enterprise and Retail"	 For review of progress on implementing Plan objectives to demonstrate successful implementation of measures relating to the promotion of economic growth as provided for by County Development Plan Chapter 5 "Economic, Enterprise and Retail" By 2020 all citizens will have access to speeds of 30Mbps, and that 50% of citizens 	Internal review of progress on implementing Plan objectives Consultations with DECC (see Section 10.4)	 Review internal systems Consultations with DECC

⁵⁵ 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.
⁵⁶ Including confirmation with development management that the following impacts have been considered and including use of monitoring data, where available: habitat loss; disturbance (e.g. due to noise and lighting along transport corridors)' and 'displacement of protected species such as birds and bats.

Environmental	SEO Code	Indicators	Targets	Sources	Remedial Action
Component	couc		will be subscribing to speeds of 100Mbps		
		Number of spatial concentrations of health problems arising from environmental factors resulting from development permitted under the Plan	No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan	Consultations with the Health Service Executive and EPA	Consultations with the Health Service Executive and EPA
		Proportion of people reporting regular cycling / walking to school and work above previous CSO figures	Increase in the proportion of people reporting regular cycling / walking to school and work above previous CSO figures	 CSO data Monitoring of Galway County Council's Climate Change Adaptation Strategy 2019-2024 	 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.
		Number of spatial plans that include specific green infrastructure mapping	 Require all local level land use plans to include specific green infrastructure mapping 	Internal review of local land use plans	Review internal systems
Soil (and Land)	S	Proportion of population growth occurring on infill and brownfield lands compared to greenfield (also relevant to Material Assets)	 Maintain built surface cover nationally to below the EU average of 4% as per the NPF 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 To map brownfield and infill land parcels across the County 	 EPA Geoportal Compilation of greenfield and brownfield development for the DHLGH AA/Screening for AA for each application 	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.
		Instances where contaminated material generated from brownfield and infill must be disposed of	Dispose of contaminated material in compliance with EPA guidance and waste management requirements	Internal review of grants of permission where contaminated material must be disposed of	Consultations with the EPA and Development Management
		Environmental assessments and AAs as relevant for applications for brownfield and infill development prior to planning permission	Screen for and undertake environmental assessments and AA as relevant for applications for brownfield and infill development prior to planning permission	Internal monitoring of grants of permission	Review internal systems
Water	W	Status of water bodies as reported by the EPA Water Monitoring Programme for the WFD	Not to cause deterioration in the status of any surface water or affect the ability of any surface water to achieve 'good status' Implementation of the objectives of the River Basin Management Plan	EPA Monitoring Programme for WFD compliance	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. 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.
		Number of incompatible developments permitted within flood risk areas	Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk	• Internal monitoring of likely significant environmental effects of grants of permission	Where planning applications are being permitted on flood zones, the Council will ensure that such grants are in compliance with the Flood Risk

Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action
Component					Management Guidelines and include appropriate flood risk mitigation and management measures.
Material Assets	MA	Programmed delivery of Irish Water infrastructure for all key growth towns in line with Irish Water Investment Plan and prioritisation programme to ensure sustainable growth can be accommodated Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the Plan	All new developments granted permission to be connected to and adequately and appropriately served by waste water treatment over the lifetime of the Plan Where septic tanks are proposed, for planning permission to be only granted when applications demonstrate that the outfall from the septic tank will not – incombination with other septic tanks—contribute towards any surface or ground water body not meeting the objective of good status under the Water Framework Directive Facilitate, as appropriate, Irish Water in developing water and wastewater infrastructure See also targets relating to greenfield and brownfield development of land under Soil and broadband under Population and Human Health	Internal monitoring of likely significant environmental effects of grants of permission Consultations with the Irish Water (see Section 10.4) DHLGH in conjunction with Local Authorities	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.
		Proportion of people reporting regular cycling / walking to school and work above previous CSO figures	Increase in the proportion of people reporting regular cycling / walking to school and work above previous CSO figures	CSO data Monitoring of Galway County Council's Climate Change Adaptation Strategy 2019-2024	 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.
Air	A	Proportion of journeys made by private fossil fuel-based car compared to previous National Travel Survey levels NO _x , SO _x , PM10 and PM2.5 as part of Ambient Air Quality Monitoring	Decrease in proportion of journeys made by private fossil fuel-based car compared to previous National Travel Survey levels Improvement in Air Quality trends, particularly in relation to transport related emissions of NO _x and particulate matter	CSO data Data from the National Travel Survey EPA Air Quality Monitoring Consultations with Department of Transport and Department of Environment, Climate and Communications (see Section 10.4)	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
Climatic Factors	С	Implementation of Plan measures relating to climate reduction targets	For review of progress on implementing Plan objectives to demonstrate successful implementation of measures relating to climate reduction targets	Internal monitoring of likely significant environmental effects of grants of permission	Review internal systems
		A competitive, low-carbon, climate-resilient and environmentally sustainable economy Share of renewable energy in transport	Contribute towards transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050 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	 Monitoring of Galway County Council's Climate Change Adaptation Strategy 2019-2024 EPA Annual National Greenhouse Gas Emissions Inventory reporting Climate Action Regional Office Consultations with DECC (at monitoring evaluation - see 	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.

Environmental	SEO Code	Indicators	Targets	Sources	Remedial Action
Component	Code				
			charging and transmission infrastructure, in compliance with the provisions of the Plan	Section 10.4)	
		Carbon dioxide (CO ₂) emissions across the electricity generation, built environment and transport sectors	 Contribute towards the target of aggregate reduction in carbon dioxide (CO₂) emissions of at least 80% (compared to 1990 levels) by 2050 across the electricity generation, built environment and transport sectors 		
		Energy consumption, the uptake of renewable options and solid fuels for residential heating	To promote reduced energy consumption and support the uptake of renewable options and a move away from solid fuels for residential heating		
		Proportion of journeys made by private fossil fuel-based car compared to previous levels	Decrease in the proportion of journeys made by residents of the County using private fossil fuel-based car compared to previous levels	CSO data Monitoring of Galway County Council's Climate Change Adaptation Strategy 2019-2024	 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.
		Proportion of people reporting regular cycling / walking to school and work above previous CSO figures	Increase in the proportion of people reporting regular cycling / walking to school and work above previous CSO figures	CSO data Monitoring of Galway County Council's Climate Change Adaptation Strategy 2019-2024	 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.
Cultural Heritage	СН	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	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	Internal monitoring of likely significant environmental effects of grants of permission	 Where monitoring reveals visitor or development pressure is causing negative effects on designated archaeological or architectural heritage, the Council will work with Regional Assembly, Fáilte Ireland and the National Monuments Service and other stakeholders, as relevant, to address pressures through additional mitigation
		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	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	Consultation with DHLGH (see Section 10.4).	
Landscape	L	Number of developments permitted that result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in Land Use Plans, resulting from development which is granted permission under the Plan	No developments permitted which result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in Land Use Plans, resulting from development which is granted permission under the Plan	Internal monitoring of likely significant environmental effects of grants of permission	Where monitoring reveals developments permitted which result in avoidable adverse visual impacts on the landscape, the Council will re- examine Plan provisions and the effectiveness of their implementation

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

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

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
European Level			
SEA Directive (2001/42/EC)	 Contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development. Provide for a high level of protection of the environment by carrying out an environmental assessment of plans and programmes which are likely to have significant effects on the environment. 	 Carry out and environmental assessment for plans or programmes referred to in Articles 2 to 4 of the Directive. 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. Consult with relevant authorities, stakeholders and public allowing sufficient time to make a submission. Consult other Member States where the implementation of a plan or programme is likely to have transboundary environmental effects. Inform relevant authorities and stakeholders on the decision to implement the plan or programme. Issue a statement to include requirements detailed in Article 9 of the Directive. Monitor and mitigate significant environmental effects identified by the assessment. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EIA Directive (2011/92/EU as amended by 2014/52/EU)	 Requires the assessment of the environmental effects of public and private projects which are likely to have significant effects on the environment. 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. 	All projects listed in Annex I are considered as having significant effects on the environment and require an EIA. For projects listed in Annex II, a "screening procedure" is required to determine the effects of projects on the basis of thresholds/criteria or a case by case examination. This should take into account Annex III.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Habitats Directive (92/43/EEC)	 Promote the preservation, protection and improvement of the quality of the environment, including the conservation of natural habitats and of wild fauna and flora. Contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora. Maintain or restore to favourable conservation status, natural habitats and species of wild fauna and flora of community interest. Promote the maintenance of biodiversity, taking account of economic, social, cultural and regional requirements. 	 Propose and protect sites of importance to habitats, plant and animal species. Establish a network of European sites hosting the natural habitat types 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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

CAAS for Galway County Council attainment of individual national targets. renewables. renewables. arise. Implementation of the Plan needs to

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

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	manner.	 The Security Union Agenda including CBRN-E and Protection of critical infrastructure; Policy on environmental liability and on the protection of the environment through criminal law; Safety of offshore oil and gas operations. 	arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Biodiversity Strategy for 2030 - Bringing nature back into our lives (European Commission, 2020)	The EU's biodiversity strategy for 2030 is a comprehensive, ambitious and long-term plan to protect nature and reverse the degradation of ecosystems. The strategy aims to put Europe's biodiversity on a path to recovery by 2030, and contains specific actions and commitments.	 The Strategy contains specific commitments and actions to be delivered by 2030, including: 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. 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. 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. 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. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Green Infrastructure Strategy	Aims to create a robust enabling framework in order to promote and facilitate Green Infrastructure (GI) projects.	 Promoting GI in the main EU policy areas. Supporting EU-level GI projects. Improving access to finance for GI projects. Improving information and promoting innovation. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards — in combination with other users and bodies and their plans etc. — the achievement of the objectives of the regulatory framework for environmental protection and management.
UN Kyoto Protocol (2 nd Kyoto Period), the Second European Climate Change Programme (ECCP II), Paris climate conference (COP21) 2015 (Paris Agreement)		The Kyoto Protocol is implemented through the European Climate Change Programme (ECCP II). EU member states implement measures to improve on or compliment the specified measures and policies arising from the ECCP. Under COP21, governments agreed to come together every 5 years to set more ambitious targets as required by science; report to each other and the public on how well they are doing to implement their targets; track progress towards the long-term goal through a robust transparency and accountability system.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU 2020 Climate and Energy Package	Binding legislation which aims to ensure the European Union meets its climate and energy targets for 2020. Aims to achieve a 20% reduction in EU greenhouse gas emissions from 1990 levels. Aims to raise the share of EU energy consumption produced from renewable resources to 20%. Achieve a 20% improvement in the EU's energy efficiency.	Four pieces of complimentary legislation: Reform of the EU Emissions Trading System (EU ETS) to include a cap on emission allowances in addition to existing system of national caps. Member States have agreed national targets for non-EU ETS emissions from countries outside the EU. Meet the national renewable energy targets of 16% for Ireland by 2020. Preparing a legal framework for technologies in carbon capture and	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		storage.	align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU 2030 Framework for Climate and Energy	A 2030 Framework for climate and energy, including EU-wide targets and policy objectives for the period between 2020 and 2030 that has been agreed by European countries. Targets include a 40% cut in greenhouse gas emissions compared to 1990 levels, at least a 27% share of renewable energy consumption and at least 27% energy savings compared with the business-as-usual scenario.	 To meet the targets, the European Commission has proposed the following policies for 2030: A reformed EU emissions trading scheme (ETS). New indicators for the competitiveness and security of the energy system, such as price differences with major trading partners, diversification of supply, and interconnection capacity between EU countries. First ideas for a new governance system based on national plans for competitive, secure, and sustainable energy. These plans will follow a common EU approach. They will ensure stronger investor certainty, greater transparency, enhanced policy coherence and improved coordination across the EU. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
The Clean Air for Europe Directive (2008/50/EC) (EU Air Framework Directive) Fourth Daughter Directive (2004/107/EC)	 The CAFE Directive merges existing legislation into a single directive (except for the fourth daughter directive). Sets new air quality objectives for PM_{2.5} (fine particles) including the limit value and exposure related objectives. Accounts for the possibility to discount natural sources of pollution when assessing compliance against limit values. Allows the possibility for time extensions of three years (PM₁₀) or up to five years (NO₂, benzene) for complying with limit values, based on conditions and the assessment by the European Commission. 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. 	 Sets objectives for ambient air quality designed to avoid, prevent or reduce harmful effects on human health and the environment as a whole. Aims to assess the ambient air quality in Member States on the basis of common methods and criteria. 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. Ensures that such information on ambient air quality is made available to the public. Aims to maintain air quality where it is good and improving it in other cases. Aims to promote increased cooperation between the Member States in reducing air pollution. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Noise Directive (2002/49/EC)	The Noise Directive - Directive 2002/49/EC relating to the assessment and management of environmental noise - is part of an EU strategy setting out to reduce the number of people affected by noise in the longer term and to provide a framework for developing existing Community policy on noise reduction from source.	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 which may be impacted upon as a result of excessive noise levels; Traw 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. 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.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Floods Directive (2007/60/EC)	Establishes a framework for the assessment and management of flood risks Reduce adverse consequences for human health, the environment, cultural heritage and economic activity associated with floods in the Community	Assess all water courses and coast lines at risk from flooding through Flood Risk Assessment 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. Implement flood risk management plans and take adequate and coordinated measures to reduce flood risk for the areas covered by the	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		Articles listed above. • Inform the public and allow the public to participate in planning process.	towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Water Framework Directive (2000/60/EC)	Establish a framework for the protection of water bodies to include inland surface waters, transitional waters, coastal waters and groundwater and their dependent wildlife and habitats. Preserve and prevent the deterioration of water status and where necessary improve and maintain "good status" of water bodies. Promote sustainable water usage. The Water Framework Directive repealed the following Directives:	 Protect, enhance and restore all water bodies and meet the environmental objectives outlined in Article 4 of the Directive. Achieve "good status" for all waters. Manage water bodies based on identifying and establishing river basins districts. Involve the public and streamline legislation. Prepare and implement a River Basin Management Plan for each river basin districts identified and a Register of Protected Areas. Establish a programme of monitoring for surface water status, groundwater status and protected areas. Recover costs for water services. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Groundwater Directive (2006/118/EC)	Protect, control and conserve groundwater. Prevent the deterioration of the status of all bodies of groundwater. 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.	Meet minimum groundwater standards listed in Annex 1 of Directive. Meet threshold values adopted by national legislation for the pollutants, groups of pollutants and indicators of pollution which have been identified as contributing to the characterisation of bodies or groups of bodies of groundwater as being at risk, also taking into account Part B of Annex II.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Drinking Water Directive (98/83/EC)	Improve and maintain the quality of water intended for human consumption. Protect human health from the adverse effects of any contamination of water intended for human consumption by ensuring that it is wholesome and clean.	 Set values applicable to water intended for human consumption for the parameters set out in Annex I. 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). 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. Ensure that any failure to meet the parametric values set in accordance with Article 5 is immediately investigated in order to identify the cause. Ensure that the necessary remedial action is taken as soon as possible to restore its quality and shall give priority to their enforcement action. Undertake remedial action to restore the quality of the water where necessary to protect human health. Notify consumers when remedial action is being undertaken except where the competent authorities consider the non-compliance with the parametric value to be trivial. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Urban Waste Water Treatment Directive (91/271/EEC)	 This Directive concerns the collection, treatment and discharge of urban waste water and the treatment and discharge of waste water from certain industrial sectors. The objective of the Directive is to protect the environment from the adverse effects of waste water discharges. 	Urban waste water entering collecting systems shall before discharge, be subject to secondary treatment. Annex II requires the designation of areas sensitive to eutrophication which receive water discharges. 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.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Environmental Liability Directive (2004/35/EC) as amended by Directive 2006/21/EC, Directive 2009/31/EC and Directive 2013/30/EU	Establish a framework of environmental liability based on the 'polluter-pays' principle, to prevent and remedy environmental damage. The stablish a framework of environmental liability based on the 'polluter-pays' principle, to prevent and remedy environmental damage.	 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. 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. 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. The operator shall bear the costs for the preventive and remedial actions taken pursuant to this Directive. The competent authority shall be entitled to initiate cost recovery proceedings against the operator. The operator may be required to provide financial security guarantees to ensure their responsibilities under the directive are met. 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. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Convention on the Protection of the Archaeological Heritage (Valletta 1992)	The aim of this (revised) Convention is to protect the archaeological heritage as a source of the Europear collective memory and as an instrument for historical and scientific study.	archaeological heritage one of the goals of urban and regional planning	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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

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Look at implementing the Bern Convention in central Eastern Europe and | arise. Implementation of the Plan needs to |

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

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

Legislation, Plan, etc. National Level	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Ireland 2040 - Our Plan, the National Planning Framework, and the National Development Plan Planning, Land Use and	The National Planning Framework is the Government's highlevel strategic plan for shaping the future growth and development of to the year 2040. It is a framework to guide public and private investment, to create and promote opportunities for people, and to protect and enhance the environment - from villages to cities, and everything around and in between. The National Development Plan sets out the investment priorities that will underpin the successful implementation of the new National Planning Framework. This will guide national, regional and local planning and investment decisions in Ireland over the next two decades, to cater for an expected population increase of over 1 million people. The PLUTO will take account of forecasted future economic and	National Strategic Outcomes as follows: 1. Compact Growth 2. Enhanced Regional Accessibility 3. Strengthened Rural Economies and Communities 4. Sustainable Mobility 5. A Strong Economy, supported by Enterprise, Innovation and Skills 6. High-Quality International Connectivity 7. Enhanced Amenity and Heritage 8. Transition to a Low-Carbon and Climate-Resilient Society 9. Sustainable Management of Water and other Environmental Resources 10. Access to Quality Childcare, Education and Health Services	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Transport Outlook 2040	demographic scenarios, affordability considerations and relevant Government policies and will: 1. Quantify in broad terms the appropriate scale of financial investment in land transport over the long term; 2. Consider how fiscal, environmental and technological developments might impact on this investment; and, 3. Identify strategic priorities for future investment to ensure land transport infrastructure provision facilitates the objectives of Project Ireland 2040.	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.	activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Planning and Development Act 2000 (as amended)	The core principal objectives of this Act are to amend the Planning Acts of 2000 – 2009 with specific regard given to supporting economic renewal and sustainable development.	 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. 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. Additionally, Environmental Impact Assessment (EIA) is required for a range of classes and large-scale projects. 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. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities (Environmental Assessment of Certain Plans and Programmes Regulations 2004 (S.I. 435 of 2004), as amended by S.I. 200 of 2011	The purpose of these Regulations is to transpose into Irish law Directive 2001/42/EC of 27 June 2001 (O.J. No. L 197, 21 July 2001) on the assessment of the effects of certain plans and programmes on the environment — commonly known as the Strategic Environmental Assessment (SEA) Directive.	 The Regulations cover plans and programmes in all of the sectors listed in article 3(2) of the Directive except land-use planning. 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. 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). 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477of 2011, as amended)	These Regulations provide a new for the implementation in Ireland of Council Directive 92/43/EEC on habitats and protection of wild fauna and flora (as amended) and for the	 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. 	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-

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	implementation of Directive 2009/147/EC of the European Parliament and of the Council on the protection of wild birds.	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.	combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Waste Management Act 1996, as amended	and control of waste; to give effect to provisions of certain acts adopted by institutions of the European communities in respect of those matters; to amend the Environmental Protection Agency Act, 1992, and to repeal certain enactments and to provide for related matters.	The Waste Management Act contains a number of key legal obligations, including requirements for waste management planning, waste collection and movement, the authorisation of waste facilities, measures to reduce the production of waste and/or promote its recovery.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards — in combination with other users and bodies and their plans etc. — the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities Environmental Objectives (FPM) Regulations 2009 (S.I 296 of 2009)	The purpose of these Regulations is to support the achievement of favourable conservation status for freshwater pearl mussels	 Set environmental quality objectives for the habitats of the freshwater pearl mussel populations named in the First Schedule to these Regulations that are within the boundaries of a site notified in a candidate list of European sites, or designated as a Special Area of Conservation, under the European Communities (Natural Habitats) Regulations, 1997 (S.I. No. 94/1997). Require the production of sub-basin management plans with programmes of measures to achieve these objectives. Set out the duties of public authorities in respect of the sub-basin management plans and programmes of measure. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities Environmental Objectives (Groundwater) Regulations 2010 (S.I 9 of 2010), as amended (S.I. No. 366 of 2016)	Objectives (Groundwater) Regulations 2010 (S.I. No. 9 of 2010) to make further provision to implement Commission Directive 2014/80/EU of 20 June 2014 amending Annex II to Directive 2006/118/EC of the European Parliament and of the Council on the protection of groundwater against pollution and deterioration.	 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. 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. 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. 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. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2014 (S.I. No. 31 of 2014)	These Regulations, which give effect to Ireland's 3 rd Nitrates Action Programme, provide statutory support for good agricultural practice to protect waters against pollution from agricultural sources	The Regulations include measures such as: Periods when land application of fertilisers is prohibited Limits on the land application of fertilisers Storage requirements for livestock manure; and Monitoring of the effectiveness of the measures in terms of agricultural practice and impact on water quality.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute

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			towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Climate Action and Low Carbon Development Act 2015, as amended	An Act to provide for the approval of plans by the Government in relation to climate change for the purpose of pursuing the transition to a low carbon, climate resilient and environmentally sustainable economy.	When considering a plan or framework, for approval, the Government shall endeavour to achieve the national transition objective within the period to which the objective relates and shall, in endeavouring to achieve that objective, ensure that such objective is achieved by the implementation of measures that are cost effective and shall, for that purpose, have regard to: The ultimate objective specified in Article 2 of the United Nations Framework Convention on Climate Change done at New York on 9 May 1992 and any mitigation commitment entered into by the European Union in response or otherwise in relation to that objective, The policy of the Government on climate change, Climate justice, Any existing obligation of the State under the law of the European Union or any international agreement referred to in section 2; and The most recent national greenhouse gas emissions inventory and projection of future greenhouse gas emissions, prepared by the Agency.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards — in combination with other users and bodies and their plans etc. — the achievement of the objectives of the regulatory framework for environmental protection and management.
Climate Action Plan 2023	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 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.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
The Sustainable Development Goals National Implementation Plan (2018 – 2020)	response to the 2030 Agenda for Sustainable Development and provides a whole-of-government approach to implement the 17 Sustainable Development Goals (SDGs). • The Plan provides a 'SDG Matrix' which identifies the responsible Government Departments for each of the 169 targets. It also includes a 'SDG Policy Map' indicating the relevant national policies for each of the targets.	 The Plan identifies four strategic priorities to guide implementation: Awareness: raise public awareness of the SDGs; Participation: provide stakeholders opportunities to engage and contribute to follow-up and review processes, and further develop national implementation of the Goals; Support: encourage and support efforts of communities and organisations to contribute towards meeting the SDGs, and foster public participation; and Policy alignment: develop alignment of national policy with the SDGs and identify opportunities for policy coherence. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Infrastructure and Capital Investment Plan (2016-2021)	€27 billion multi-annual Exchequer Capital Investment Plan, which is supported by a programme of capital investment in the wider State sector, and which over the period 2016 to 2021 will help to lay the foundations for continued growth in Ireland.	 This Capital Plan reflects the Government's commitment to supporting strong and sustainable economic growth and raising welfare and living standards for all. 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. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the

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			regulatory framework for environmental protection and management.
European Union (Birds and Natural Habitats) (Sea- Fisheries) Regulations 2013 (S.I. 290 of 2013)	These regulations have been drafted to implement the responsibilities of the Minister for Agriculture Food and the Marine in relation to sea fisheries in Natura 2000 sites, in accordance with the Habitats and Birds Directives as transposed by the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2011).	 Regulation 3 provides for the submission of a Fisheries Natura Plan in relation to planned fisheries; Regulation 4 provides for a screening of a Fisheries Natura Plan to determine whether or not an appropriate assessment is required; Regulation 5 provides for an appropriate assessment of a Fisheries Natura Plan and also provides for public and statutory consultation; 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; Regulation 7 provides for publication of the adopted Fisheries Natura Plan; Regulation 8 provides for a Risk Assessment of unplanned fisheries and also provides for public and statutory consultation on the assessment; Regulation 9 provides for the issue of a Natura Declaration to prohibit, restrict including restricting by permit, control, etc. of sea fishing activities; Regulation 10 provides for Natura Permits to be issued where required by Natura Declarations; and Regulations 11 to 31 deal with functions of authorised officers and related matters, offences, etc. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Ireland's National Renewable Energy Action Plan 2010 (Irish Government submission to the European Commission)	The National Renewable Energy Action Plan (NREAP) sets out the Government's strategic approach and concrete measures to deliver on Ireland's 16% target under Directive 2009/28/EC.	The NREAP sets out the Member State's national targets for the share of energy from renewable sources to be consumed in transport, electricity and heating and cooling in 2020, and demonstrates how the Member State will meet its overall national target established under the Directive.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards — in combination with other users and bodies and their plans etc. — the achievement of the objectives of the regulatory framework for environmental protection and management.
Strategy for Renewable Energy (2012-2020)	The Government's overarching strategic objective is to make renewable energy an increasingly significant component of Ireland's energy supply by 2020, so that at a minimum it will achieve its legally binding 2020 target in the most costefficient manner for consumers. Of critical importance is the role which the renewable energy sector plays in job creation and economic activity as part of the Government's action plan for jobs.	This document sets out five strategic goals, reflecting the key dimensions of the renewable energy challenge to 2020: Increasing on and offshore wind, Building a sustainable bioenergy sector, Fostering R&D in renewables such as wave & tidal, Growing sustainable transport; and Building out robust and efficient networks.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Climate Mitigation Plan 2017	The Plan represents an initial step to set Ireland on a pathway to achieve the deep decarbonisation required in Ireland by mid-century in line with the Government's policy objectives.	The National Mitigation Plan focuses on the following issues: Climate Action Policy Framework Decarbonising Electricity Generation Decarbonising the Built Environment Decarbonising Transport An Approach to Carbon Neutrality for Agriculture, Forest and Land Use Sectors	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute

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			towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Clean Air Strategy [in preparation]	framework necessary to identify and promote integrated measures across government policy that are required to reduce air pollution and promote cleaner air while delivering on wider national objectives.	 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. The Strategy should also help tackle climate change. 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. 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. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EirGrid's Grid25 Strategy and associated Grid25 Implementation 2017-2022	secure, reliable, economical and efficient transmission system for Ireland; "Our vision is of a grid developed to match future needs, so it can safely and reliably carry power all over the country to the major towns and cities and onwards to every home, farm and business where the electricity is consumed and so it can meet the needs of consumers and generators in a sustainable way."	Grid25, EirGrid's roadmap to uprate the electricity transmission grid by 2025, continues to be implemented so as to increase the capacity of the grid, to satisfy future demand, and to help Ireland meet its target of 40 per cent of electricity from renewable energy by 2020.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Strategy for the Future Development of National and Regional Greenways (2018)	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. • It also aims to increase the number and geographical spread of Greenways of scale and quality around the country over the next 10 years with a consequent significant increase in the number of people using Greenways as a visitor experience and as a recreational amenity.	 A Strategic Greenway network of national and regional routes, with a number of high capacity flagship routes that can be extended and/or link with local Greenways and other cycling and walking infrastructure; Greenways of scale and appropriate standard that have significant potential to deliver an increase in activity tourism to Ireland and are regularly used by overseas visitors, domestic visitors and locals thereby contributing to a healthier society through increased physical activity; Greenways that provide a substantially segregated off road experience linking places of interest, recreation and leisure in areas with beautiful scenery of different types with plenty to see and do; and Greenways that provide opportunities for the development of local businesses and economies, and Greenways that are developed with all relevant stakeholders in line with an agreed code of practice. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Water Resources Plan [in preparation]	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. 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.	 The key objectives of the plan are to: Identify areas where there are current and future potential water supply shortfalls, taking into account normal and extreme weather conditions Assess the current and future water demand from homes, businesses, farms, and industry Consider the impacts of climate change on Ireland's water resources Develop a drought plan advising measures to be taken before and during drought events Develop a plan detailing how we deal with the material that is produced as a result of treating drinking water Assess the water resources available at a national level including lakes, rivers and groundwater 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
National Strategic Plan for Aquaculture Development (2014- 2020)	Vision: "Aquaculture in RC is economically, socially and ecologically sustainable, with a developed infrastructure, strong human potentials and an organized market. The consumption of aquaculture products is equal or above EU average, while the technological development of the sector is among the best in the EU."	General development and growth objectives of marine and freshwater aquaculture (2014 – 2020): Strengthen the social, business and administrative environment for aquaculture development Increase in the total production to 24,050 tonnes while adhering to the principles of economic, social and ecological sustainability Improvement of the perception and increase in the national consumption of National products	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Construction 2020, A Strategy for a Renewed Construction Sector	 Construction 2020 sets out a package of measures agreed by the Government and is aimed at stimulating activity in the building industry. The Strategy aims both to increase the capacity of the sector to create and maintain jobs, and to deliver a sustainable sector, operating at an appropriate level. It seeks to learn the lessons of the past and to ensure that the right structures and mechanisms are in place so that they are not repeated. 	 This Strategy therefore addresses issues including: 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; Continuing improvement of the planning process, striking the right balance between current and future requirements; The availability of financing for viable and worthwhile projects; Access to mortgage finance on reasonable and sustainable terms; Ensuring we have the tools we need to monitor and regulate the sector in a way that underpins public confidence and worker safety; Ensuring a fit for purpose sector supported by a highly skilled workforce achieving high quality and standards; and Ensuring opportunities are provided to unemployed former construction workers to contribute to the recovery of the sector. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Sustainable Development: A Strategy for Ireland (1997)	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.	The Strategy addresses all areas of Government policy, and of economic and societal activity, which impact on the environment. It seeks to reorientate policies as necessary to ensure that the strong growth Ireland enjoys and seeks to maintain will be environmentally sustainable.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Landscape Strategy for Ireland 2015-2025 and National Landscape Character Assessment (pending preparation)	 The National Landscape Strategy will be used to ensure compliance with the European Landscape Convention and to establish principles for protecting and enhancing the landscape while positively managing its change. It will provide a high-level policy framework to achieve balance between the protection, management and planning of the landscape by way of supporting actions. Landscape Strategy Vision: "Our landscape reflects and embodies our cultural values and our shared natural heritage 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." 	 The objectives of the National Landscape Strategy are to: Implement the European Landscape Convention by integrating landscape into the approach to sustainable development; Establish and embed a public process of gathering, sharing and interpreting scientific, technical and cultural information in order to carry out evidence-based identification and description of the character, resources and processes of the landscape; Provide a policy framework, which will put in place measures at national, sectoral - including agriculture, tourism, energy, transport and marine - and local level, together with civil society, to protect, manage and properly plan through high quality design for the sustainable stewardship of the landscape; Ensure that we take advantage of opportunities to implement policies relating to landscape use that are complementary and mutually reinforcing and that conflicting policy objectives are avoided in as far as possible. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
National Hazardous Waste	This Plan sets out the priorities to be pursued over the next six	The revised Plan makes various recommendations including the following:	Where new land use developments or
Management Plan (EPA) 2021-	years and beyond to improve the management of hazardous	Prevention	activities occur as a result of this legislation,
2027	waste, taking into account the progress made since the previous	Collection	plan, programme, etc., individually or in
	plan and the waste policy and legislative changes that have	Self-sufficiency	combination with others, potential in-
	occurred since the previous plan was published. Section 26 of the	Regulation	combination effects (see Section 8.2) may
	Waste Management Act 1996 as amended, sets out the	Legacy issues	arise. Implementation of the Plan needs to
	overarching objectives for the National Hazardous Waste	North-south cooperation	comply with all environmental legislation and
	Management Plan. In this context, the following objectives are	Guidance and awareness	align with and cumulatively contribute
	included as priorities for the revised Plan period:	Implementation	towards – in combination with other users
	To prevent and reduce the generation of hazardous waste by		and bodies and their plans etc the
	industry and society generally;		achievement of the objectives of the
	To maximise the collection of hazardous waste with a view to		regulatory framework for environmental
	reducing the environmental and health impacts of any		protection and management.
	unregulated waste;		
	To strive for increased self-sufficiency in the management of		
	hazardous waste and to minimise hazardous waste export;		
	To minimise the environmental, health, social and economic		
Ministratel Caldelines and	impacts of hazardous waste generation and management.	The Minister issues state to a middle or and or Costing 20 of the Art	NA/In any angle of the second and th
Ministerial Guidelines such as Sustainable Rural Housing	The Department produces a range of guidelines designed to help planning outbookies. An Bound Planning and developing and	The Minister issues statutory guidelines under Section 28 of the Act which planning authorities and An Band Planning author	Where new land use developments or activities occur as a result of this legislation,
Guidelines and Flood Risk	help planning authorities, An Bord Pleanála, developers and the general public and cover a wide range of issues amongst	which planning authorities and An Bord Pleanála are obliged to have regard to in the performance of their planning functions.	plan, programme, etc., individually or in
Management Guidelines	others, architectural heritage, child care facilities, landscape,	regard to in the performance of their planning functions.	combination with others, potential in-
Management Guidennes	quarries and residential density.		combination effects (see Section 8.2) may
	quarries and residential density.		arise. Implementation of the Plan needs to
			comply with all environmental legislation and
			align with and cumulatively contribute
			towards – in combination with other users
			and bodies and their plans etc. – the
			achievement of the objectives of the
			regulatory framework for environmental
			protection and management.
HSE Healthy Ireland Framework	The vision is: "A Healthy Ireland, where everyone can enjoy	These four goals are interlinked, interdependent and mutually supportive:	Where new land use developments or
for Improved Health and	physical and mental health and wellbeing to their full	Goal 1: Increase the proportion of people who are healthy at all stages	activities occur as a result of this legislation,
Wellbeing 2013-2025	potential, where wellbeing is valued and supported at every	of life	plan, programme, etc., individually or in
	level of society and is everyone's responsibility."	Goal 2: Reduce health inequalities	combination with others, potential in-
		Goal 3: Protect the public from threats to health and wellbeing	combination effects (see Section 8.2) may
		Goal 4: Create an environment where every individual and sector of	arise. Implementation of the Plan needs to
		society can play their part in achieving a healthy Ireland	comply with all environmental legislation and
			align with and cumulatively contribute
			towards – in combination with other users
			and bodies and their plans etc the
			achievement of the objectives of the
			regulatory framework for environmental
Our Custoinable Futures A	A modium to long town from such for advancing contained	Coto out the challenges facing up and have up wight address there in	protection and management.
Our Sustainable Future: A	A medium to long term framework for advancing sustainable	Sets out the challenges facing us and how we might address them in making cure that quality of life and energy wellbeing can be improved.	Where new land use developments or
framework for Sustainable Development for Ireland 2012	development and the green economy in Ireland. It identifies spatial planning as a key challenge for sustainable development and sets	making sure that quality of life and general wellbeing can be improved and sustained in the decades to come.	activities occur as a result of this legislation, plan, programme, etc., individually or in
Development for Ireland 2012	a series of measures to address these challenges.	and sustained in the decades to come.	combination with others, potential in-
	a series of friedsures to address triese challenges.		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.

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Smarter Travel – A Sustainable		Others lower level aims include:	Where new land use developments or
Transport Future — A New Transport Policy for Ireland 2009 — 2020 (2009)	system can be achieved.	 reduce distance travelled by private car and encourage smarter travel, including focusing population growth in areas of employment and to encourage people to live in close proximity to places of employment ensuring that alternatives to the car are more widely available, mainly through a radically improved public transport service and through investment in cycling and walking improving the fuel efficiency of motorised transport through improved fleet structure, energy efficient driving and alternative technologies strengthening institutional arrangements to deliver the targets 	activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Investing in our Future: A Strategic Framework for Investment in Land Transport (SFILT) — Department of Transport, Tourism and Sport	State's investment to best develop and manage Ireland's land transport network over the coming decades.	The three priorities stated in SFILT are: Priority 1: Achieve steady state maintenance (meaning that the maintenance and renewal of the existing transport system is at a sufficient level to maintain the system in an adequate condition); Priority 2: Address urban congestion; and Priority 3: Maximise the value of the road network. In delivering on the steady state maintenance objective set out in SFILT, the Plan includes for: Planned replacement programme for the bus fleet operated under Public Service Obligation ("PSO") contracts; Tram refurbishment and asset renewal in the case of light rail; and To the extent within the Authority' remit, support for the operation of the existing rail network within the GDA.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Delivering a Sustainable Energy Future for Ireland – The Energy Policy Framework 2007 – 2020 (2007)	White paper setting out a framework for delivering a sustainable energy future in Ireland. Outlines strategic Goals for:	The underpinning Strategic Goals are: Ensuring that electricity supply consistently meets demand Ensuring the physical security and reliability of gas supplies to Ireland Enhancing the diversity of fuels used for power generation Delivering electricity and gas to homes and businesses over efficient, reliable and secure networks Creating a stable attractive environment for hydrocarbon exploration and production Being prepared for energy supply disruptions	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Adaptation Framework (NAF) 2018 and associated regional, local and sectoral adaptation plans	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	 Adaptation under this Framework should seek to minimise costs and maximise the opportunities arising from climate change. Adaptation actions range from building adaptive capacity (e.g. increasing awareness, sharing information and targeted training) through to policy and finance-based actions. Adaptation actions must be risk based, informed by existing vulnerabilities of our society and systems and an understanding of projected climate change. Adaptation actions taken to increase climate resilience must also consider impacts on other sectors and levels of governance 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards — in combination with other users and bodies and their plans etc. — the achievement of the objectives of the regulatory framework for environmental protection and management.
National Renewable Energy Action Plan (2010)	 Sets out the Member State's national targets for the share of energy from renewable sources to be consumed in transport, electricity and heating and cooling in 2020, and demonstrates how the Member State will meet its overall 	Including Ireland's 16% target of gross final consumption to come from renewables by 2020.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-

CAAS for Galway County Council | demonstrates how the Member State will meet its overall | combination with others, potential in-

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	national target established under the Directive.		combination effects (see Section 8.2) may
			arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users
			and bodies and their plans etc. – the
			achievement of the objectives of the regulatory framework for environmental protection and management.
National Energy Efficiency	This is the second National Energy Efficiency Action Plan for	The Plan reviews the original 90 actions outlined in the first Plan and	Where new land use developments or
Action Plan for Ireland (2009 – 2020)	Ireland.	updates/renews/removes them as appropriate.	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
Wildlife Act of 1976	The act provides protection and conservation of wild flora	Provides protection for certain species, their habitats and important	protection and management. Where new land use developments or
Wildlife Act of 1970	and fauna.	ecosystems	activities occur as a result of this legislation,
Wildlife (Amendment) Act, 2000		Give statutory protection to NHAs	plan, programme, etc., individually or in
		Enhances wildlife species and their habitats	combination with others, potential in-
		Includes more species for protection	combination effects (see Section 8.2) may arise. Implementation of the Plan needs to
			comply with all environmental legislation and
			align with and cumulatively contribute
			towards – in combination with other users
			and bodies and their plans etc. – the achievement of the objectives of the
			regulatory framework for environmental
			protection and management.
Actions for Biodiversity (2017- 2021) Ireland's National	Sets out strategic objectives, targets and actions to conserve and restore Ireland's biodiversity and to prevent and reduce	To mainstream biodiversity in the decision-making process across all sectors.	Where new land use developments or activities occur as a result of this legislation,
Biodiversity Plan	the loss of biodiversity in Ireland and globally.	To substantially strengthen the knowledge base for conservation,	plan, programme, etc., individually or in
	, , , , , , , , , , , , , , , , , , , ,	management and sustainable use of biodiversity.	combination with others, potential in-
		To increase awareness and appreciation of biodiversity and ecosystems services.	combination effects (see Section 8.2) may arise. Implementation of the Plan needs to
		To conserve and restore biodiversity and ecosystem services in the wider countryside.	comply with all environmental legislation and align with and cumulatively contribute
		To conserve and restore biodiversity and ecosystem services in the marine environment.	towards – in combination with other users and bodies and their plans etc. – the
		To expand and improve on the management of protected areas and legally protected species.	achievement of the objectives of the regulatory framework for environmental
		To substantially strengthen the effectiveness of international governance for biodiversity and ecosystem services.	protection and management.
National Broadband Plan (2012)	Sets out the strategy to deliver high speed broadband	The Plan sets out:	Where new land use developments or
	throughout Ireland.	A clear statement of Government policy on the delivery of High-Speed Broad lead of the statement of Government policy on the delivery of High-Speed Broad lead of the statement of Government policy on the delivery of High-Speed Broad lead of the statement of Government policy on the delivery of High-Speed Broad lead of the statement of Government policy on the delivery of High-Speed Broad lead of the statement of Government policy on the delivery of High-Speed Broad lead of the statement of Government policy on the delivery of High-Speed Broad lead of the statement of Government policy on the delivery of High-Speed Broad lead of the statement of Government policy on the delivery of High-Speed Broad lead of the statement of Government policy on the delivery of High-Speed Broad lead of the statement of Government policy on the delivery of High-Speed Broad lead of the statement of Government policy on the delivery of High-Speed Broad lead of the statement of Government policy on the delivery of High-Speed Broad lead of the statement of Government policy of High-Speed Broad lead of the statement of Government policy of High-Speed Broad lead of the statement of Government policy of High-Speed Broad lead of the statement of Government policy of High-Speed Broad lead of the statement of Government policy of High-Speed Broad lead of the statement of Government policy of High-Speed Broad lead of the statement policy of the statement policy of High-Speed Bro	activities occur as a result of this legislation,
		Broadband. Specific targets for the delivery and rollout of high-speed broadband and	plan, programme, etc., individually or in combination with others, potential in-
		the speeds to be delivered.	combination effects (see Section 8.2) may
		The strategy and interventions that will underpin the successful	arise. Implementation of the Plan needs to
		implementation of these targets.	comply with all environmental legislation and
		A series of specific complementary measures to promote implementation of Government policy in this area.	align with and cumulatively contribute towards – in combination with other users
	l .	5. Covernment poncy in this treat	

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
			and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities (Water Policy) Regulations of 2003 (SI 722 of 2003) European Communities (Water Policy) Regulations of 2003 (SI 350 of 2014) European Communities Environmental Objectives (Surface waters) Regulations of 2009 (SI 272 of 2009)	Transpose the Water Framework Directive into legislation. Outlines the general duty of public authorities in relation to water. 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.	 Implements River basin districts and characterisation of RBDs and River Basin Management Plans. Requires the public to be informed and consulted on the Plan and for progress reports to be published on RBDs. Implements a Register of protected areas, Classification systems and Monitoring programmes for water bodies. Allows the competent authority to recover the cost of damage/destruction of status of water body. Outlines environmental objectives and programme of measures and environmental quality standards for priority substances. Outlines criteria for assessment of groundwater. Outlines environmental objectives to be achieved for surface water bodies. Outlines surface water quality standards. Establishes threshold values for the classification and protection of surface waters against pollution and deterioration in quality. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities Environmental Objectives (Groundwater) Regulations of 2010 (SI 9 of 2010)	Transpose the requirements of the Groundwater Directive 2006/118/EC into Irish Legislation.	Outlines environmental objectives to be achieved for groundwater bodies of groundwater against pollution and deterioration in quality. Sets groundwater quality standards. Outlines threshold values for the classification and protection of groundwater.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Water Pollution Acts 1977 to 1990	The Water Pollution Acts allow Local Authorities the authority regulate and supervise actions relating to water in their division.	 The Water Pollution Acts enable local authorities to: Prosecute for water pollution offences. Attach appropriate pollution control conditions in the licensing of effluent discharges from industry, etc., made to waters. Issue notices ("section 12 notices") to farmers, etc., specifying measures to be taken within a prescribed period to prevent water pollution. 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; Seek court orders, including High Court injunctions, to prevent, terminate, mitigate or remedy pollution/its effects. Prepare water quality management plans for any waters in or adjoining their functional areas. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Water Services Act 2007 Water Services (Amendment) Act 2012 Water Services Act (No. 2) 2013	Provides the water services infrastructure. Outlines the responsibilities involved in delivering and managing water services. Identifies the authority in charge of provision of water and waste water supply. 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.	public and group water supplies, in compliance with national and EU drinking water standards	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the
		Ensuring the provision of the remaining infrastructure needed to provide secondary waste water treatment, for compliance with the requirements	achievement of the objectives of the regulatory framework for environmental

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		of the EU Urban Waste water Treatment Directive.	protection and management.
Irish Water's Water Services Strategic Plan 2015 and associated Proposed Capital Investment Plan (2014-2016)	This Water Services Strategic Plan sets out strategic objectives for the delivery of water services over the next 25 years up to 2040. It details current and future challenges which affect the provision of water services and identifies the priorities to be tackled in the short and medium term.	Six strategic objectives as follows: Meet Customer Expectations. Ensure a Safe and Reliable Water Supply. Provide Effective Management of Waste water. Protect and Enhance the Environment. Support Social and Economic Growth. Invest in the Future.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Raised Bog SAC Management Plan and Review of Raised Bog Natural Heritage Areas	regard to national and local economic, social and cultural needs	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. 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.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Food Harvest 2020	Food Harvest 2020 is a roadmap for the Irish food industry, as it seeks to innovate and expand in response to increased global demand for quality foods. It sets out a vision for the potential growth in agricultural output after the removal of milk quotas.	Seeks for the improvement of all agricultural sectors at all levels in terms of sustainability, environmental consideration and marketing development.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Agri-vision 2015 Action Plan	Outlines the vision for agricultural industry to improve competitiveness and response to market demand while respecting and enhancing the environment	not applicable	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Rural Environmental Protection Scheme (REPS) Agri-Environmental Options Scheme (AEOS) Green, Low-Carbon, Agri- environment Scheme (GLAS)	 Agri-environmental funding schemes aimed at rural development for the environmental enhancement and protection. GLAS is the new replacement for REPS and AEOS which are both expiring. 	 Establish best practice farming methods and production methods in order to protect landscapes and maximise conservation. Protect biodiversity, endangered species of flora and fauna and wildlife habitats. Ensure food is produced with the highest regard to the environment. Implement nutrient management plans and grassland management plans. Protect and maintain water bodies, wetlands and cultural heritage. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Rural Development Programme	The National Rural Development Programme, prepared by the Department of Agriculture, Fisheries and Food, sets out a national programme based on the EU framework for rural development and prioritises improving the competitiveness of agriculture, improving the environment and improving the quality of life in rural areas	At a more detailed level, the programme also: Supports structural change at farm level including training young farmers and encouraging early retirement, support for restructuring, development and innovation; Aims to improve the environment, biodiversity and the amenity value of the countryside by support for land management through funds such as Natura 2000 payments etc.; and Aims to improve quality of life in rural areas and encouraging diversification of economic activity through the implementation of local development strategies such as non-agricultural activities	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Forestry Programme (2014-2020)	Represents Ireland's proposals for 100% State aid funding for a new Forestry Programme for the period 2014 – 2020.	Measures include the following: Afforestation and Creation of Woodland NeighbourWood Scheme Forest Roads Reconstitution Scheme Woodland Improvement Scheme Native Woodland Conservation Scheme Knowledge Transfer and Information Actions Producer Groups Innovative Forest Technology Forest Genetic Reproductive Material Forest Management Plans	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
River Basin Management Plan	River Basin Management Plans set out the measures planned to maintain and improve the status of waters.	 Aim to protect and enhance all water bodies in the RBD and meet the environmental objectives outlined in Article 4 of the Water Framework Directive. Identify and manages water bodies in the RBD. Establish a programme of measures for monitoring and improving water quality in the RBD. Involve the public through consultations. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Peatlands Strategy (2015-2025)	This Strategy aims to provide a long-term framework within which all of the peatlands within the State can be managed responsibly in order to optimise their social, environmental and economic contribution to the well-being of this and future generations.	Objectives of the Strategy:	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Ecgisiation, Flan, etc.	bulling of high level unity purpose, objective	actions.	comply with all environmental legislation and
		 To ensure that Ireland's peatlands are sustainably managed so that their benefits can be enjoyed responsible. To inform appropriate regulatory systems to facilitate good decision making in support of responsible use. To inform the provision of appropriate incentives, financial supports and disincentives where required. 	align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Flood Risk Management Plans arising from National Catchment Flood Risk Assessment and Management Programme	The national Catchment Flood Risk Assessment and Management (CFRAM) programme commenced in Ireland in 2011 and is being overseen by the Office of Public Works. The CFRAM Programme is intended to deliver on core components of the National Flood Policy, adopted in 2004, and on the requirements of the EU Floods Directive.	CFRAM Studies have been undertaken for all River Basin Districts. The studies are focusing on areas known to have experienced flooding in the past and areas that may be subject to flooding in the future either due to development pressures or climate change. Flood Risk and Hazard mapping, including Flood Extent Mapping, was finalised in 2017. The final outputs from the studies are the CFRAM Plans, finalised in 2018. The Plans define the current and future flood risk in the River Basin Districts and set out how this risk can be managed.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Draft National Bioenergy Plan 2014 - 2020	The Draft Bioenergy Plan sets out a vision as follows: Bioenergy resources contributing to economic development and sustainable growth, generating jobs for citizens, supported by coherent policy, planning and regulation, and managed in an integrated manner.	 Three high level goals, of equal importance, based on the concept of sustainable development are identified: To harness the market opportunities presented by bioenergy in order to achieve economic development, growth and jobs. To increase awareness of the value, opportunities and societal benefits of developing bioenergy. To ensure that bioenergy developments do not adversely impact the environment and its living and non-living resources. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards — in combination with other users and bodies and their plans etc. — the achievement of the objectives of the regulatory framework for environmental protection and management.
Draft Renewable Electricity Policy and Development Framework (DCCAE) 2016	Goal: To optimise the opportunities in Ireland for renewable electricity development on land at significant scale, to serve both the All Island Single Electricity Market and any future regional market within the European Union, in accordance with European and Irish law, including Directive 2009/28/EC: On the promotion of the use of energy from renewable resources.	Objective: To develop a Policy and Development Framework for renewable electricity generation on land to serve both the All Island Single Electricity Market and any future regional market within the European Union, with particular focus on large scale projects for indigenous renewable electricity generation. This will, inter alia, provide guidance for planning authorities and An Bord Pleanála.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards — in combination with other users and bodies and their plans etc. — the achievement of the objectives of the regulatory framework for environmental protection and management.
National Alternative Fuels Infrastructure for the Transport Sector (DTTAS) 2017- 2030	This Framework sets targets to achieve an appropriate level of alternative fuels infrastructure for transport, which is relative to national policy and Irish market needs. Non-infrastructure-based incentives to support the use of the infrastructure and the uptake of alternative fuels are also included within the scope of the Framework.	Targets for alternative fuel infrastructure include the following: AFV forecasts Electricity targets Natural gas (CNG, LNG) targets Hydrogen targets Biofuels targets LPG targets 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 incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental

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			protection and management.
Food Wise 2025 (DAFM)	Food Wise 2025 sets out a ten-year plan for the agri-food sector. It underlines the sector's unique and special position within the Irish economy, and it illustrates the potential which exists for this sector to grow even further.	 Food Wise 2025 identifies ambitious and challenging growth projections for the industry over the next ten years including: 85% increase in exports to €19 billion. 70% increase in value added to €13 billion. 60% increase in primary production to €10 billion. The creation of 23,000 additional jobs all along the supply chain from producer level to high-end value-added product development. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Cycle Network Scoping Study 2010	Outlines objectives and actions aimed at developing a strong cycle network in Ireland Sets out 19 specific objectives, and details the 109 actions, aimed at ensuring that a cycling culture is developed	Sets a target where 10% of all journeys will be made by bike by 2020 Proposes the planning, infrastructure, communication, education and stakeholder participations measures required to implement the initiative	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Policy Framework for Alternative Fuels Infrastructure for Transport in Ireland 2017 to 2030	This National Policy Framework on Alternative Fuels Infrastructure for Transport represents the first step in communicating our longer-term national vision for decarbonising transport by 2050, the cornerstone of which is our ambition that by 2030 all new cars and vans sold in Ireland will be zero-emissions capable. By 2030 it is envisaged that the movement in Ireland to electrically-fuelled cars and commuter rail will be well underway, with natural gas and biofuels developing as major alternatives in the freight and bus sectors.	This policy set out to achieve five key goals in transport: Reduce overall travel demand Maximise the efficiency of the transport network Reduce reliance on fossil fuels Reduce transport emissions Improve accessibility to transport These goals remain the cornerstone of transport policy and are fully aligned to the objectives of this National Policy Framework.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Tourism Action Plan 2019-2021	The Tourism Action Plan 2019-2021 sets out actions that the Tourism Leadership Group has identified as priorities to be progressed until 2021 in order to maintain sustainable growth in overseas tourism revenue and employment. Each action involves specific tourism stakeholders, both in the public and private sectors, all of whom we expect to proactively work towards the completion of actions within the specified timeframe.	The Plan contains 27 actions focusing on the following areas: Policy Context Marketing Ireland as a Visitor Destination Enhancing the Visitor Experience Research in the Irish Tourism Sector Supporting Local Communities in Tourism Wider Government Policy International Context Co-ordination Structures	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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Tourism Policy Statement: People, Place and Policy – Growing Tourism to 2025	The main goal of this policy statement is to have a vibrant, attractive tourism sector that makes a significant contribution to employment across the country; is economically, socially and environmentally sustainable; helps promote a positive image of Ireland overseas, and is a sector in which people want to work.	The Tourism Policy Statement sets three headline targets to be achieved by 2025: • Overseas tourism revenue of €5 billion per year • net of inflation excluding carrier receipts; • 250,000 people employed in tourism; and • 10 million overseas visitors to Ireland per year.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Draft Renewable Electricity Policy and Development Framework (DCCAE)	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 incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Alternative Fuels Infrastructure for the Transport Sector (DTTAS) 2017- 2030	This Framework sets targets to achieve an appropriate level of alternative fuels infrastructure for transport, which is relative to national policy and Irish market needs. Non-infrastructure-based incentives to support the use of the infrastructure and the uptake of alternative fuels are also included within the scope of the Framework.	Targets for alternative fuel infrastructure include the following: AFV forecasts Electricity targets Natural gas (CNG, LNG) targets Hydrogen targets Biofuels targets LPG targets 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 incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Regional/ County/Local Level			
Northern and Western Regional Economic and Spatial Strategy 2020-2032	The Regional Spatial and Economic Strategy provides a long-term strategic planning and economic framework for the Northern and Western Region in order to support the implementation of the National Planning Framework.	The Northern and Western Regional Economic and Spatial Strategy includes provisions for its nine constituent local authorities: Donegal County Council; Leitrim County Council; Cavan County Council; Monaghan County Council; Roscommon County Council; Mayo County Council; Sligo County Council; Galway City Council; Galway 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 incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Integrated Implementation Plan 2019-2024	The Transport Strategy for the Greater Dublin Area 2016-2035, which established an overall framework for transport investment over the next two decades and was subject to full SEA and Stage 2 AA, is a key policy shaping the six-year Integrated Infrastructure	The Implementation Plan identifies investment proposals for a number of areas including: Bus; Light Rail;	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-

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	Plan. The priorities in the Integrated Infrastructure Plan align with the objectives and priorities set out in the Transport Strategy, focused on improving public and sustainable transport.	Heavy Rai; Integration Measures and Sustainable Transport Investment; Integrated Service Plan; and Integration and Accessibility.	combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
NPWS Conservation Plans and/or Conservation Objectives for SACs and SPAs	Management planning for nature conservation sites has a number of aims. These include: To identify and evaluate the features of interest for a site To set clear objectives for the conservation of the features of interest To describe the site and its management To identify issues (both positive and negative) that might influence the site To set out appropriate strategies/management actions to achieve the objectives	 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. These objectives are used when carrying out appropriate assessments for plans and projects that might impact on these sites. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Groundwater Protection Schemes	A Groundwater Protection Scheme provides guidelines for the planning and licensing authorities in carrying out their functions, and a framework to assist in decision-making on the location, nature and control of developments and activities in order to protect groundwater.	A Groundwater Protection Scheme aims to maintain the quantity and quality of groundwater, and in some cases improve it, by applying a risk assessment-based approach to groundwater protection and sustainable development.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards — in combination with other users and bodies and their plans etc. — the achievement of the objectives of the regulatory framework for environmental protection and management.
Local Economic and Community Plans (LECPs), including the County Galway LECP	The overarching vision for each LECP is: "to promote the well-being and quality of life of citizens and communities	The purpose of the LECP, as provided for in the Local Government Reform Act 2014, is to set out, for a six-year period, the objectives and actions needed to promote and support the economic development and the local and community development of the relevant local authority area, both by itself directly and in partnership with other economic and community development stakeholders.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Land Use Plans including those in force in County Galway (including the overarching Galway County Development Plan 2022-2028), and those in force in other adjoining planning authorities (including development plans for Galway City, County Mayo, County Roscommon, County Offaly,	Outline planning objectives for land use development (including transport and tourism objectives). Strategic framework for planning and sustainable development including those set out in National Planning Framework and Regional Economic and Spatial Strategies. Set out the policies and proposals to guide development in the specific Local Authority area.	 Identify future infrastructure, development and zoning required. Protect and enhances amenities and environment. Guide planning authority in assessing proposals. Aim to guide development in the area and the amount of nature of the planned development. Aim to promote sustainable development. Provide for economic development and protect natural environmental, heritage. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the

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County Tipperary, County Clare and local plans for settlements)			achievement of the objectives of the regulatory framework for environmental protection and management.
County Galway Landscape Character Assessment and Landscape Character Assessments in adjoining counties	Characterises the geographical dimension of the landscape.	 Identifies the quality, value, sensitivity and capacity of the landscape area. Guides strategies and guidelines for the future development of the landscape. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Galway County Heritage and Biodiversity Plan 2017-2022	The aim of the Galway County Heritage and Biodiversity Plan 2017-2022 is to place heritage and biodiversity at the heart of public life in the County. This will be achieved through increasing awareness, participation, enjoyment, knowledge and understanding of our shared heritage to lead to its proper conservation, management and protection and safeguarding it for future generations.	Actions are specified under the following five themes:	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Galway Noise Action Plan 2019- 2023	Noise Action Plans are prepared in accordance with the requirements of the Environmental Noise Regulations 2006, Statutory Instrument 140 of 2006. These Regulations give effect to the EU Directive 2002/49/EC relating to the assessment and management of environmental noise. This Directive sets out a process for managing environmental noise in a consistent manner across the EU and the Noise Regulations set out the 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 incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Galway County Council's Climate Adaptation Strategy 2019-2024	The Strategy is developed around 4 key themes/goals: 1. Critical Buildings & Infrastructure 2. Natural and Cultural Heritage 3. Water Resources & Flood Risk Management 4. Community Services	The Galway County Council Climate Change Adaptation Strategy 2019-2024 seeks to: Improve education, awareness-raising and capacity on climate change, adaptation (and mitigation), impact reduction and early warning across the Local Authority departments, businesses, communities and individuals; Integrate climate change measures into policies, strategies and planning, as well as the identification of areas as risk to inform planning an decision making; and Strengthen resilience and adoptive capacity and develop and implement co-ordinated responses to climate risk where needed.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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Local Authority Renewable Energy Strategy (LARES)	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 incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Connacht-Ulster Regional Waste Management Plan 2015-2021	These plans give effect to national and EU waste policy, and address waste prevention and management (including generation, collection and treatment) over the period 2015-2021.	To manage wastes in a safe and compliant manner, a clear strategy, policies and actions are required.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards — in combination with other users and bodies and their plans etc. — the achievement of the objectives of the regulatory framework for environmental protection and management.
Fáilte Ireland Tourism plans, strategies, including those relating to the Wild Atlantic Way	Fáilte Ireland's work includes preparing various plans and strategies for Ireland's Wild Atlantic Way and other brands and initiatives. These plans are subject to their own environmental assessment processes and any project arising is required to be consistent with and conform with the provisions of all adopted/approved Statutory Policies, Strategies, Plans and Programmes, including provisions for the protection and management of the environment.	Some of Fáilte Ireland's plans and strategies include various projects relating to land use and infrastructural development, including those relating to development of land or on land and the carrying out of land use activities. Many of these projects exist already while some are not currently in existence. The Statutory Policies, Strategies, Plans and Programmes that provide for different projects undergo a variety of environmental assessments. These assessments ensure that environmental effects are considered, including: those arising from new and intensified uses and activities; and those arising from various sectors such as tourism.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Various existing, planned and emerging projects provided for by the above plans and programmes	These projects have been provided for by higher-level plans and programmes.	These projects will contribute towards the development of the area to which the Plan relates and/or wider area and will contribute towards environmental protection and management.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.