

SEA ENVIRONMENTAL REPORT

FOR

RELEVANT PROPOSED MATERIAL ALTERATIONS

TO THE

**DRAFT TUAM LOCAL AREA PLAN
2023-2029**

for: Galway County Council

Áras an Chontae
Prospect Hill
Galway



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List of Abbreviations

AA	Appropriate Assessment
CAFE	Cleaner Air for Europe
CFRAM	Catchment Flood Risk Assessment and Management
CORINE	Co-ORDinated INformation on the Environment
CSO	Central Statistics Office
DAFM	Department of Agriculture, Food and Marine
DCCA	Department of Communication, Climate Action and Environment
DCHG	Department of Culture, Heritage and the Gaeltacht
DEHLG	Department of the Environment, Heritage and Local Government
DHPLG	Department of Housing, Planning and Local Government
EIA	Environmental Impact Assessment
EPA	Environmental Protection Agency
EQS	Environmental Quality Standard
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 Culture, Heritage and the Gaeltacht under Section 12 of the National Monuments (Amendment) Act, 1994.

Scoping

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

Strategic Environmental Assessment (SEA)

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

Strategic Environmental Objective (SEO)

Strategic Environmental Objectives (SEOs) are methodological measures developed from policies which generally govern environmental protection objectives established at International, Community or Member State level and are used as standards against which the provisions of the Draft Plan, the Proposed Material Alterations 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 Proposed Material Alterations to 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 Proposed Material Alterations.

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

The SEA is being undertaken in order to comply with Section 20 of the Planning and Development Act, as amended.

1.2 Implications for the Planning Authority

The Proposed Material Alterations were screened for the need to undertake SEA. Certain Proposed Material Alterations were determined as requiring full SEA. The SEA Screening Determination accompanies this SEA Environmental Report and the Proposed Material Alterations document. Appendix II to this SEA Environmental Report comprises the SEA Screening Report that was prepared to inform the SEA Screening Determination.

This SEA Environmental Report provides the findings of the assessment and will be placed on public display alongside the Proposed Material Alterations. The Elected Members will be required to take account of this document, the Proposed Material Alterations and any submissions received on these after public display.

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

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

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

Section 2 The Draft Plan and associated Proposed Material Alterations

2.1 Introduction

Galway County Council has prepared a new Draft 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 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.

2.4 Proposed Material Alterations

The Proposed Material Alterations are outlined in detail in the accompanying Proposed Material Alteration document. The Alteration Numbers provided in this report can be used to locate this detail in the accompanying Proposed Material Alteration document.

Alterations proposed include those relating to maps, including land use zoning, and text.

The Proposed Material Alterations were screened for the need to undertake SEA and the alterations below were determined as

requiring full SEA. The SEA Screening Determination accompanies this SEA Environmental Report and the Proposed Material Alterations document. Appendix II to this SEA Environmental Report comprises the SEA Screening Report that was prepared to inform the Determination. Proposed Material Alterations requiring SEA and consideration in this SEA Environmental Report are as follows¹:

- MA9
- MA38
- MA39
- MA49
- MA50
- MA51
- MA55
- MA56
- MA57

2.5 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.

¹ For detail, please refer to Proposed Material Alterations document.

2.6 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 Draft Plan, to which the Proposed Material Alterations relate, sits within a hierarchy of statutory documents setting out public policy for, among other things, land use planning, infrastructure, sustainable development, tourism, environmental protection and environmental management. The Draft Plan, to which the Proposed Material Alterations relate, must comply with relevant higher-level strategic actions and may, in turn, guide lower level strategic actions. These documents include plans and programmes such as those detailed in Appendix I² (see also, Section 4 "Environmental Baseline", Section 5 "Strategic Environmental Objectives", Section 6 "Description of Alternatives" and Section 9 "Mitigation Measures"). These documents have been subject to their own environmental assessment processes, as relevant.

The National Planning Framework (NPF) sets out Ireland's planning policy direction up to 2040. The NPF is to be implemented through Regional Spatial and Economic Strategies (RSESs) and lower tier Development Plans and Local Area Plans. The RSES for the 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.

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.

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.

Section 3 SEA Methodology

3.1 Introduction to the Iterative Approach

The preparation of the Draft Plan, Proposed Material Alterations, 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 preparation of the Draft Plan. The requirement for AA is provided under the EU Habitats Directive (Directive 1992/43/EEC).

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

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

The Proposed Material Alterations were subject to Screening for AA and it was determined that Stage 2 AA was not required for the Proposed Material Alterations. A Screening for AA Report accompanies this SEA Environmental Report.

³ Except as provided for in Article 6(4) of the Habitats Directive, viz. There must be:
 (a) no alternative solution available,
 (b) imperative reasons of overriding public interest for the plan to proceed; and
 (c) adequate compensatory measures in place.

3.2.2 Integrated Biodiversity Impact Assessment

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

Scoping

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

Baseline

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

Alternatives

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

Impact assessment

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

Mitigation and monitoring

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

Reporting

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

Communication and consultation

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

3.3 Strategic Flood Risk Assessment

Strategic Flood Risk Assessment (SFRA) has informed this report. An SFRA document detailing changes to the original SFRA that was placed on public display alongside the Draft Plan on foot of submissions and providing more detail on the SFRA implications of Proposed Material Alterations is included as Appendix A to the SEA Screening document (which is Appendix II to this SEA Environmental Report).

3.4 Scoping

The scope of environmental issues to be dealt with by the SEA of the Plan 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 (as part of the SEA scoping process at pre-Draft Plan stage) 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.

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

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 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.

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 Proposed Material Alterations. The Environmental Report provides the Council, stakeholders and the public with a clear understanding of the likely environmental consequences of the Proposed Material Alterations.

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

This Environmental Report has been informed by recommendations contained in submissions to date. The SEA Environmental Report prepared for the Draft Plan will be finalised in advance of adoption of the Plan taking into account, among other things, the content of this SEA Environmental Report.

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

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

3.7 SEA Statement

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

SEA Environmental Report for Relevant Proposed Material Alterations

- 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 III 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

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

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.

were adopted by world leaders in 2015 at a United Nations Summit and came into force in 2016. These Goals include:

- Goal 3. Ensure healthy lives and promote well-being for all at all ages.
- Goal 6. Ensure availability and sustainable management of water and sanitation for all.
- Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all.
- Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
- Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
- Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable.
- Goal 12. Ensure sustainable consumption and production patterns.
- Goal 13. Take urgent action to combat climate change and its impacts.
- Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

4.4 Likely Evolution of the Environment in the Absence of a new Plan and associated Material Alterations

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

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

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

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:

4.5 Natural Capital and Ecosystem Services

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

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

spiritual enrichment, intellectual development, recreation and aesthetic 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):

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

The following natural capital and ecosystem services issues are relevant to this SEA and have been taken into account in the provisions of the Local Area Plan and the associated higher-tier 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 in connecting areas of local biodiversity with each other and with nearby designated sites so as to prevent islands of habitat from being isolated entities. They are composed of linear features, such as 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.

¹⁰ 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, Shrulle Turlough SAC (Site Code: 000525)¹⁴, 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 Sensitive 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 hydrologically connected European sites beyond 15 km (i.e. downstream of the Plan area), the Plan is not likely to not impose any potential significant effects beyond the 15 km buffer/Zone of Influence.

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

4.6.3 Natural Heritage Areas and Proposed Natural Heritage Areas

Natural Heritage Areas (NHAs) are designated due to their national conservation value for ecological and/or geological/geomorphological heritage. They cover nationally important semi-natural and natural habitats, landforms or geomorphological features, wildlife plant and animal species or a diversity of these natural attributes. NHAs are designated under the Wildlife (Amendment) Act 2000. Proposed NHAs (pNHAs) were published on a 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; red-breasted merganser; grey heron; lapwing; and light-bellied 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).

²⁰ 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 south-western 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.

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

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

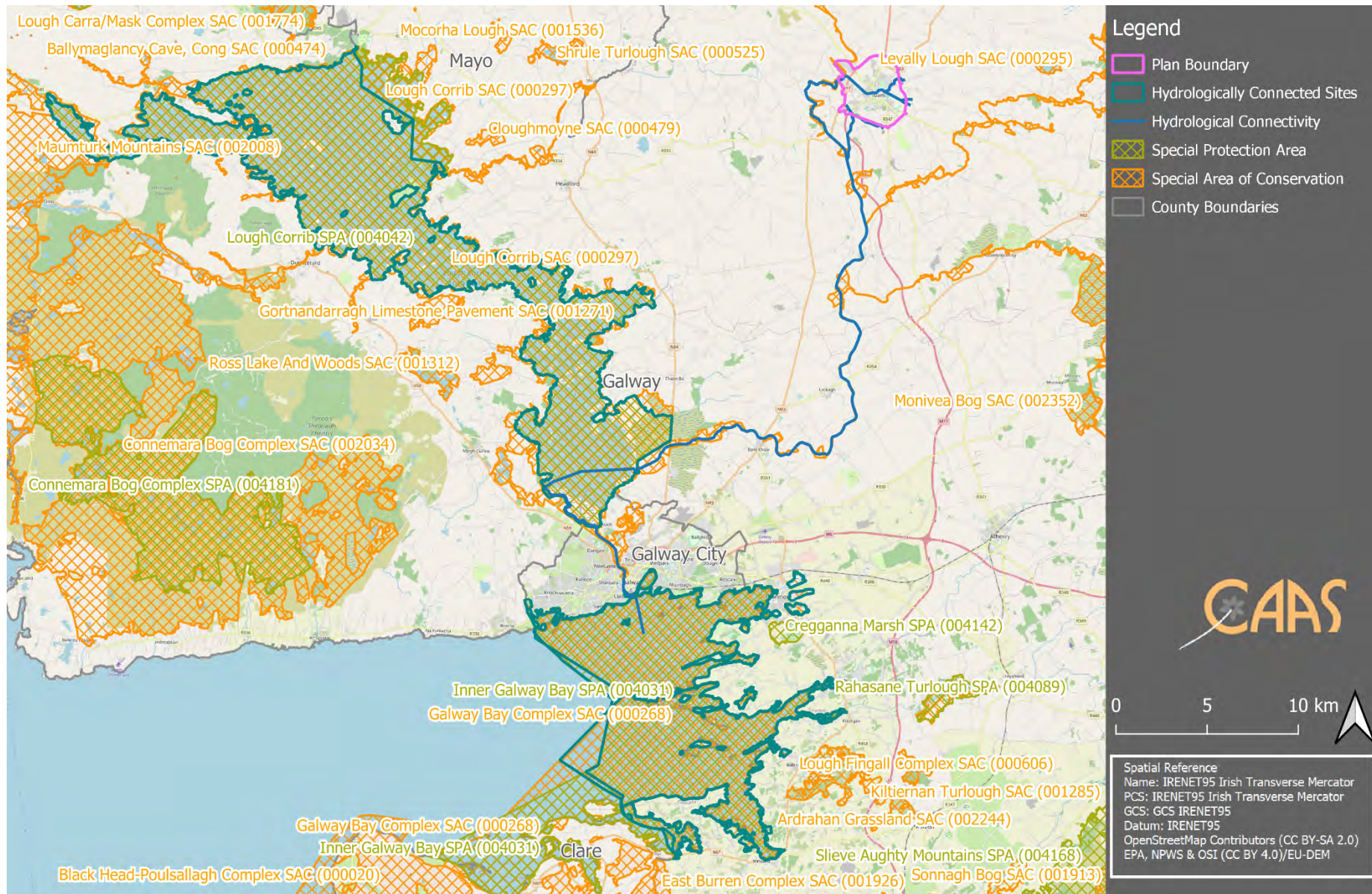


Figure 4.2 Hydrologically connected European sites beyond a 15 km buffer of Tuam Plan area

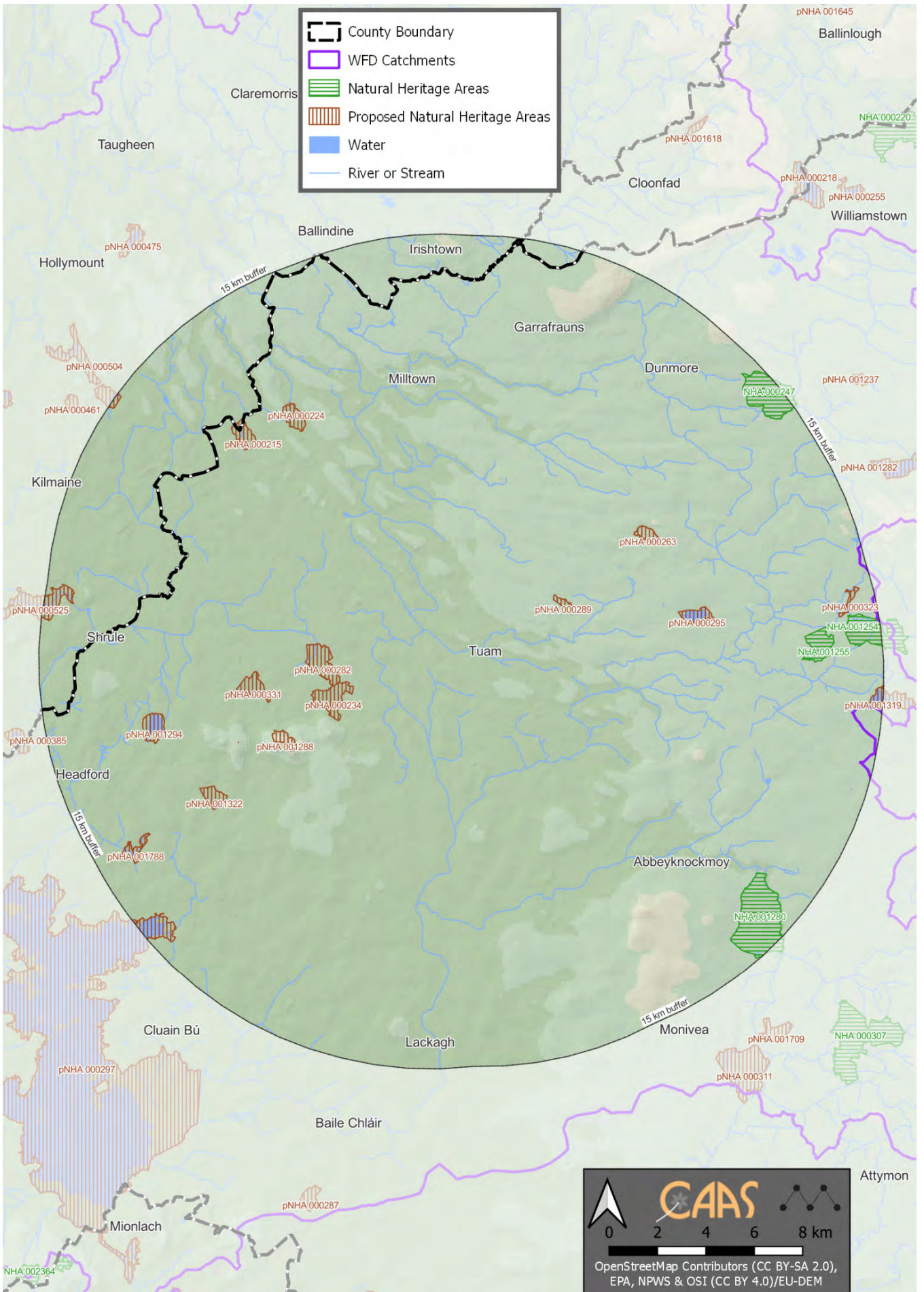


Figure 4.3 NHAs and pNHAs within and within a 15 km buffer of Tuam Plan area

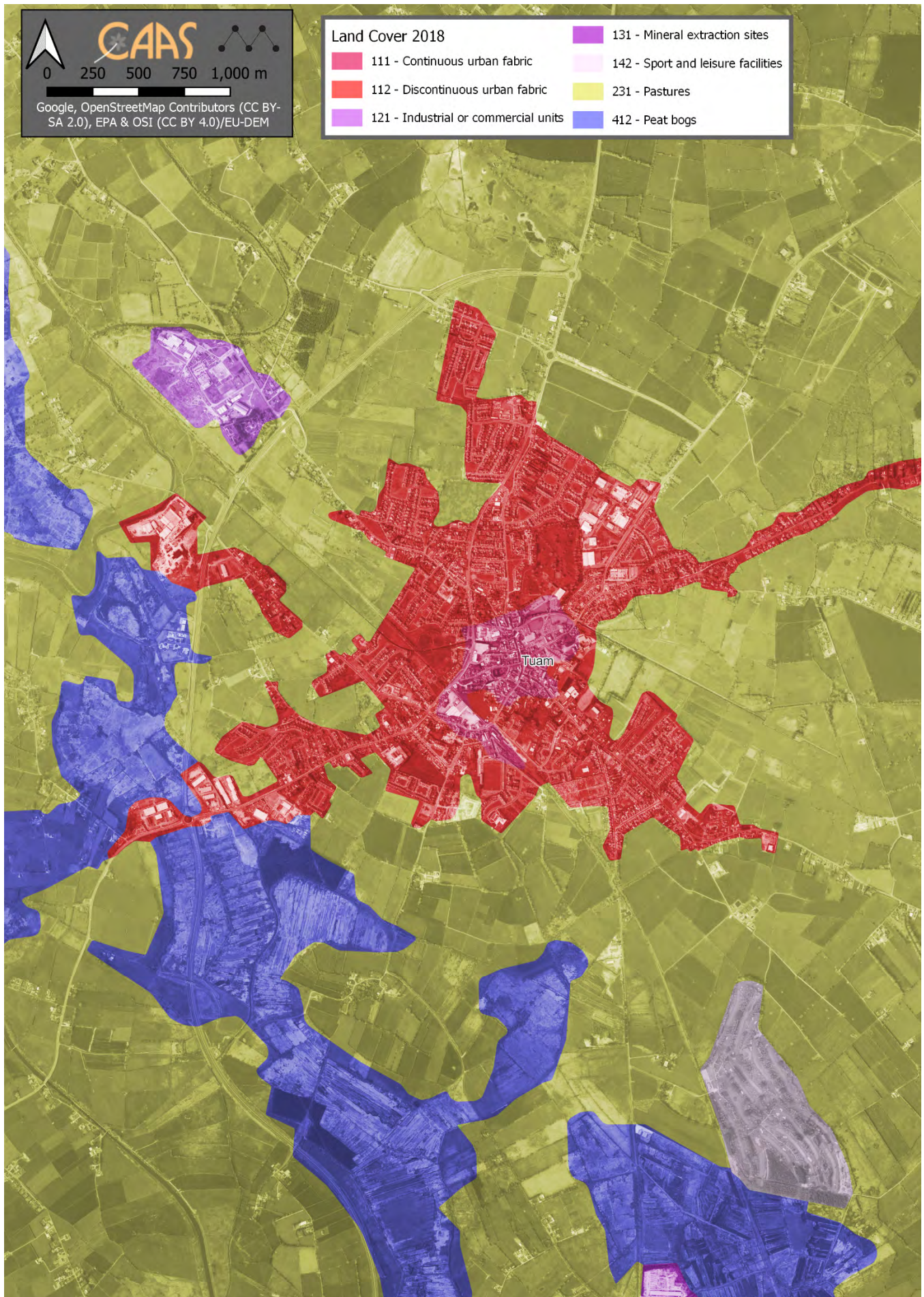


Figure 4.4 CORINE Land Cover Mapping 2018

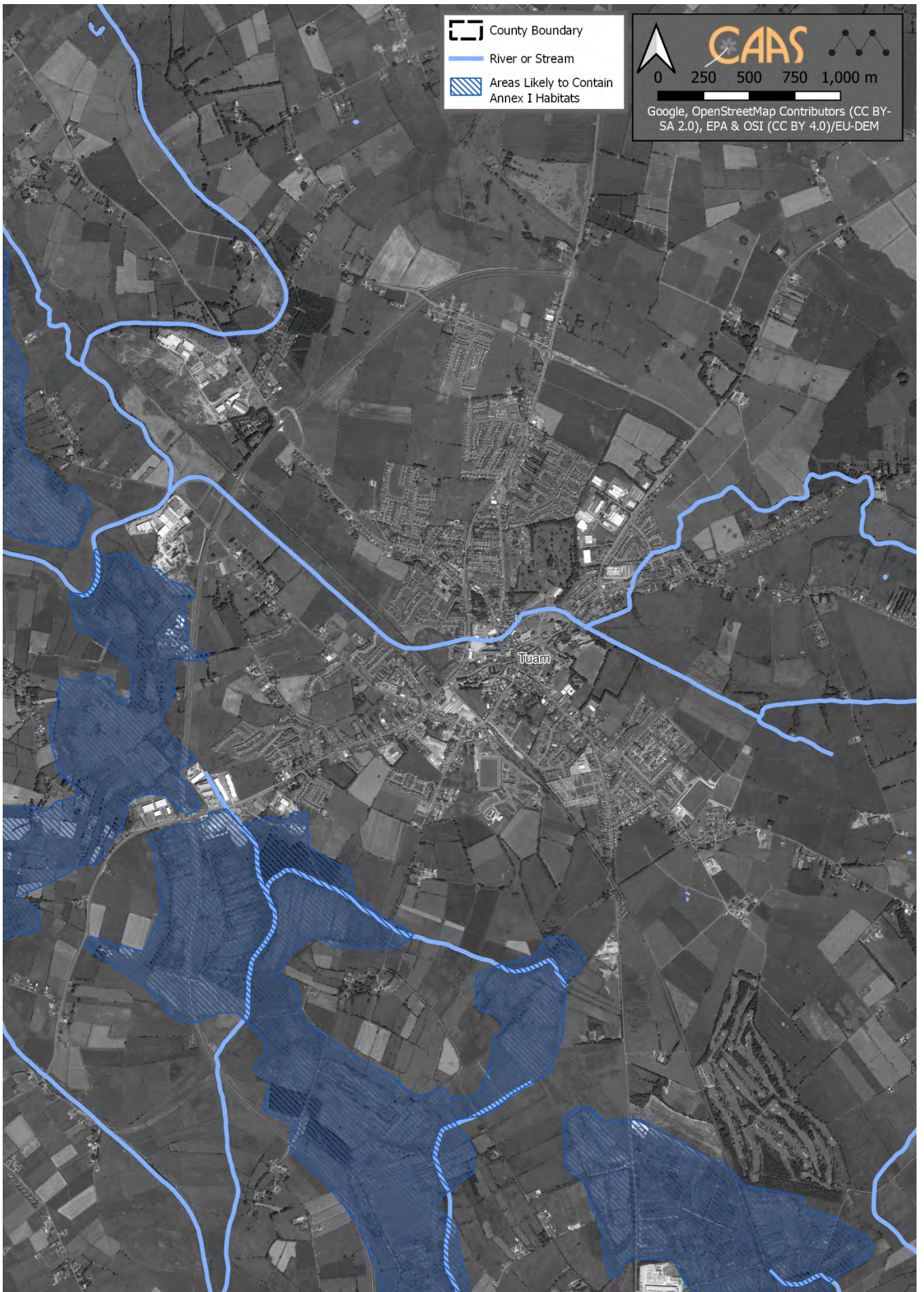


Figure 4.5 Areas Likely to Contain Annex I Habitats

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

²¹ 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 (www.gsi.ie).

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

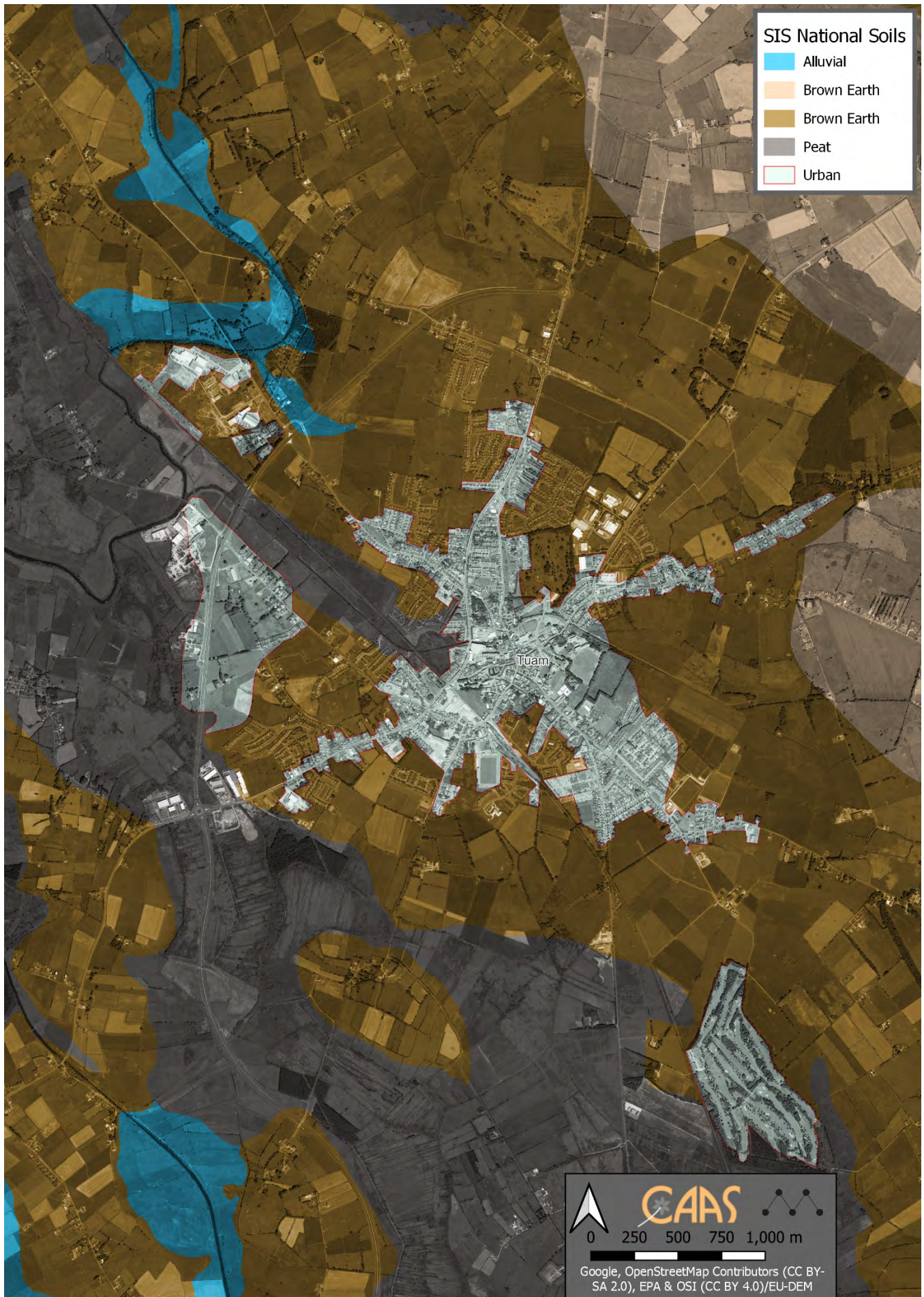


Figure 4.6 Soil types

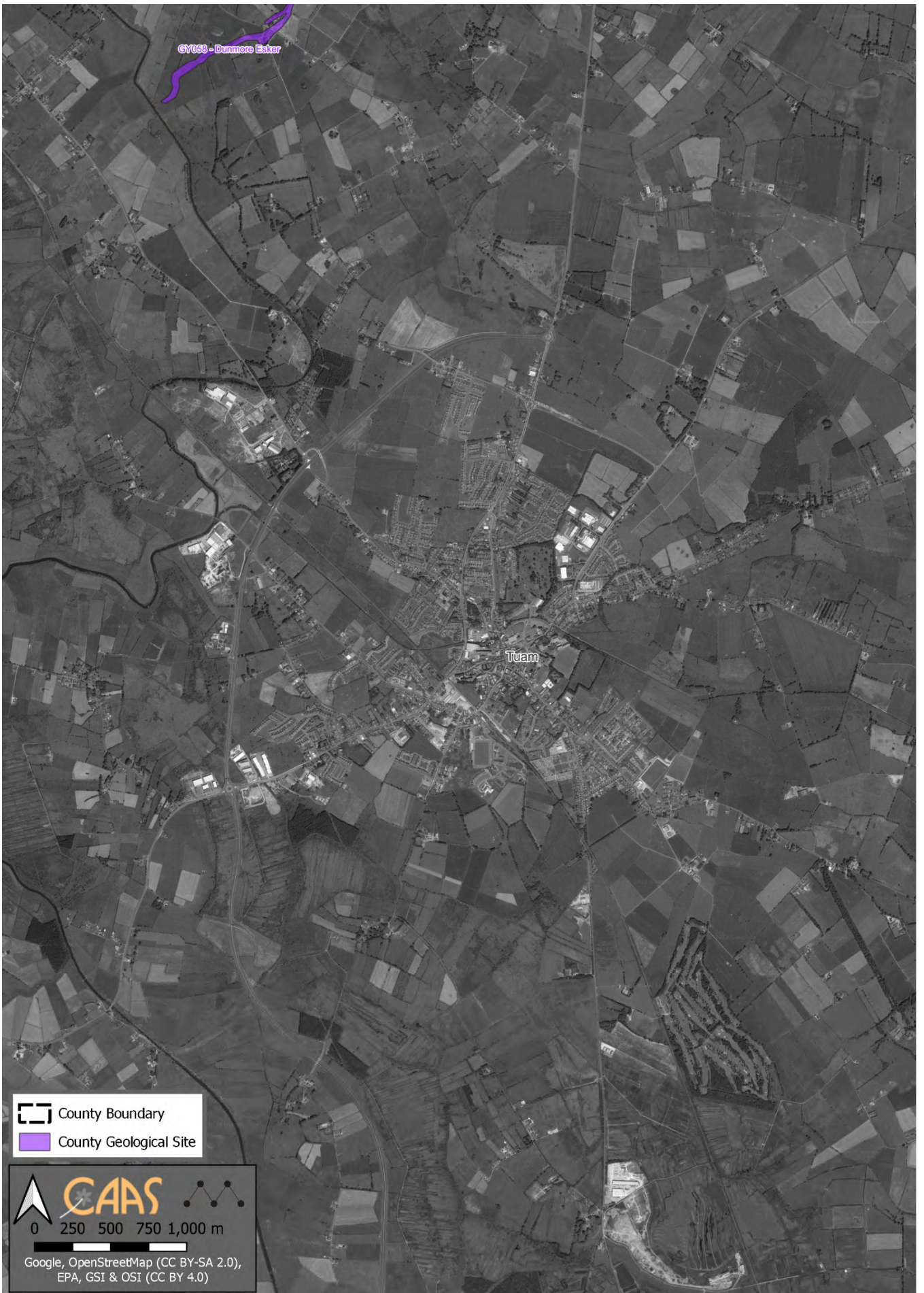


Figure 4.7 Geological heritage

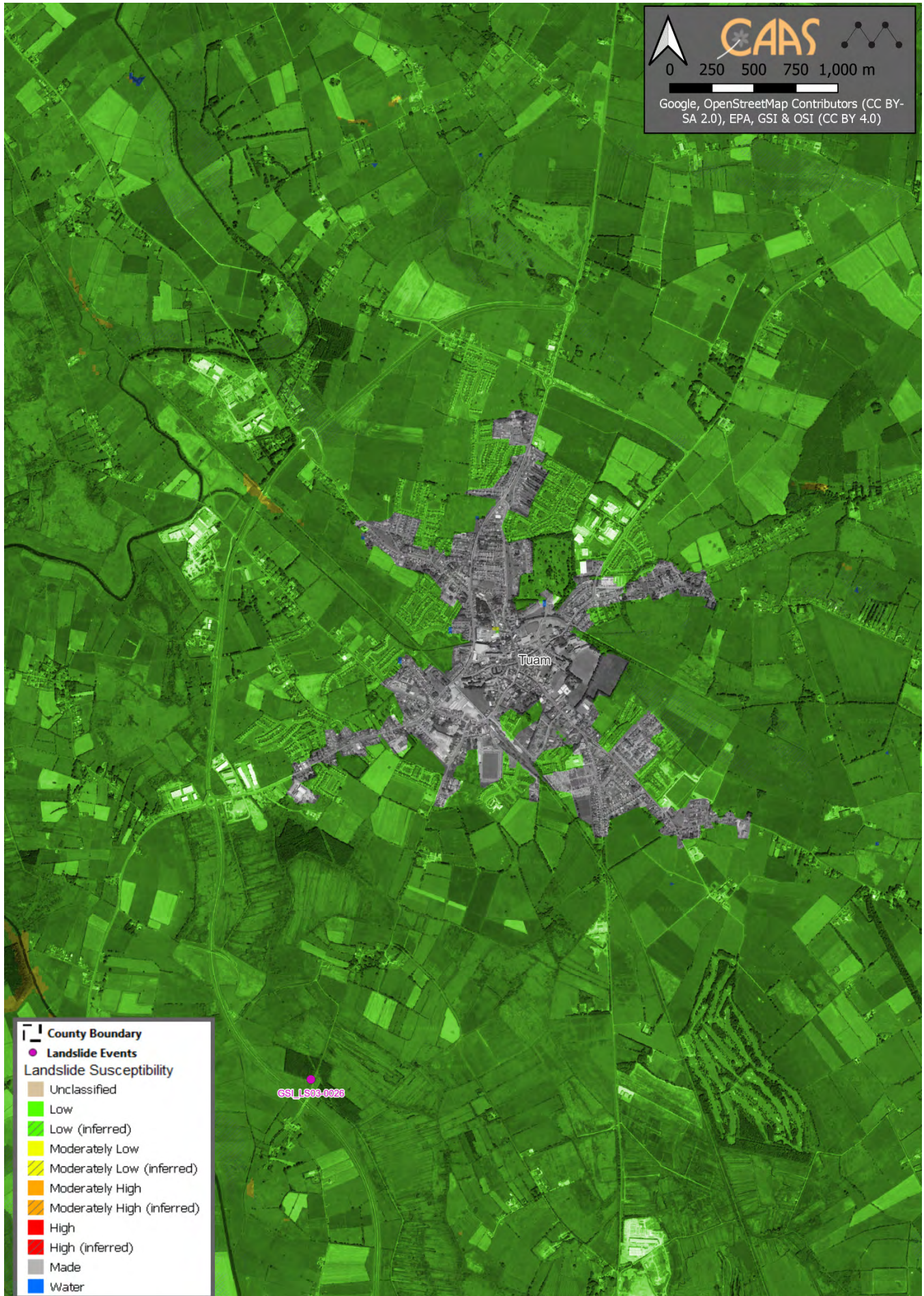


Figure 4.8 Landslide susceptibility

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

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, those pressures which need to be addressed in order to improve water quality, have been identified for waterbodies that are 'At Risk' of not meeting their water quality objectives under the WFD. There are various types of pressures identified. Sections of the River 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

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

²⁶ EPA (2019): Report on Water Quality in Ireland 2013-2018

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).

4.9.8 Flooding

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.

Strategic Flood Risk Assessment (SFRA) has informed this report. An SFRA document detailing changes to the original SFRA that was placed on public display alongside the Draft Plan on foot of submissions and providing more detail on the SFRA implications of Proposed Material Alterations is included as Appendix A to the SEA Screening document (which is Appendix II to this SEA Environmental Report).

Flood risk management and drainage provisions are already in force through the County Development Plan and related provisions have been integrated into the Draft Plan. In addition, land use zoning contained within the Draft Plan and associated Proposed Material Alterations 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 findings of the SFRA have informed both the Plan and the SEA.

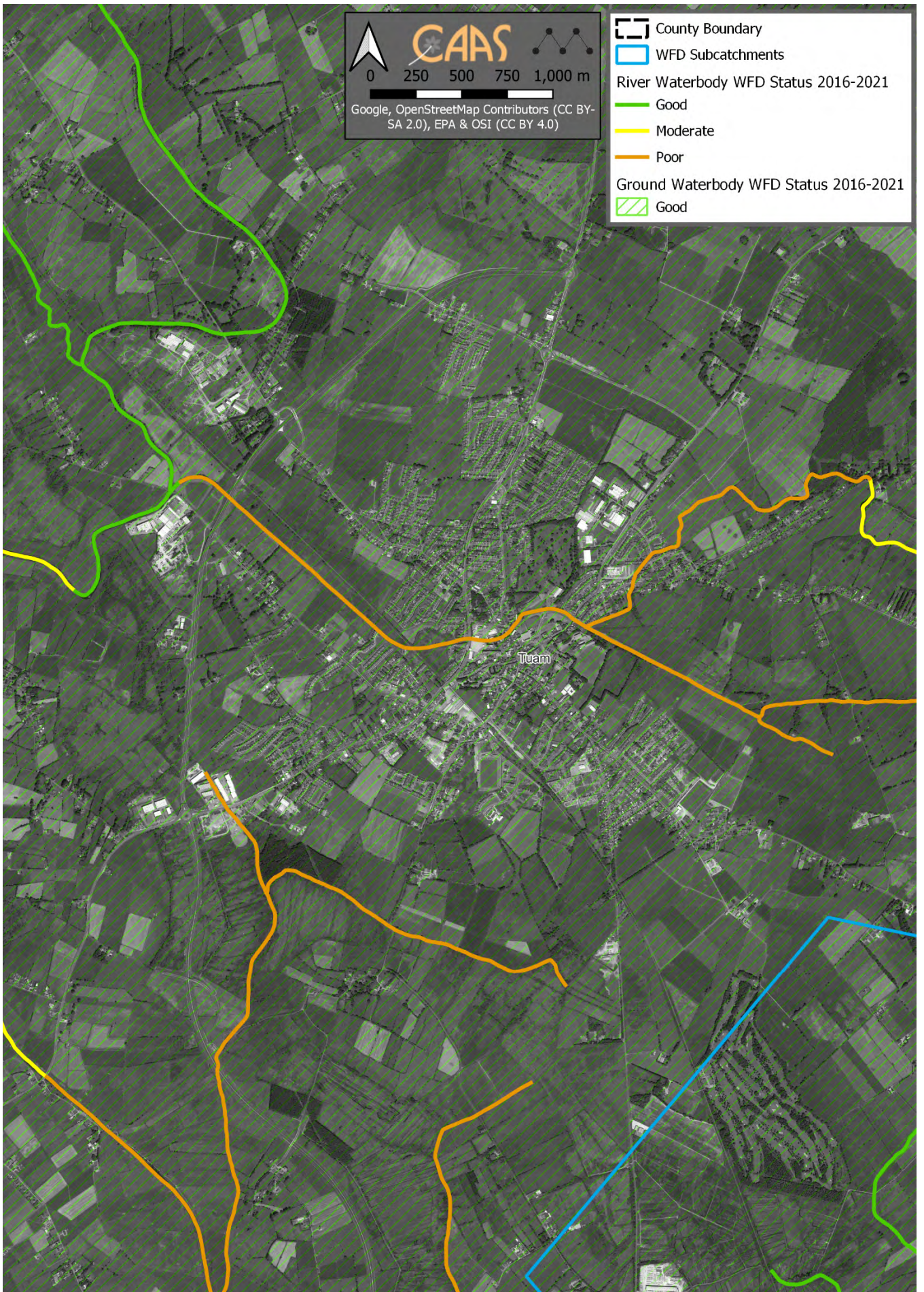


Figure 4.9 WFD Surface Waterbodies and WFD Ground Waterbodies Status (2016-2021)

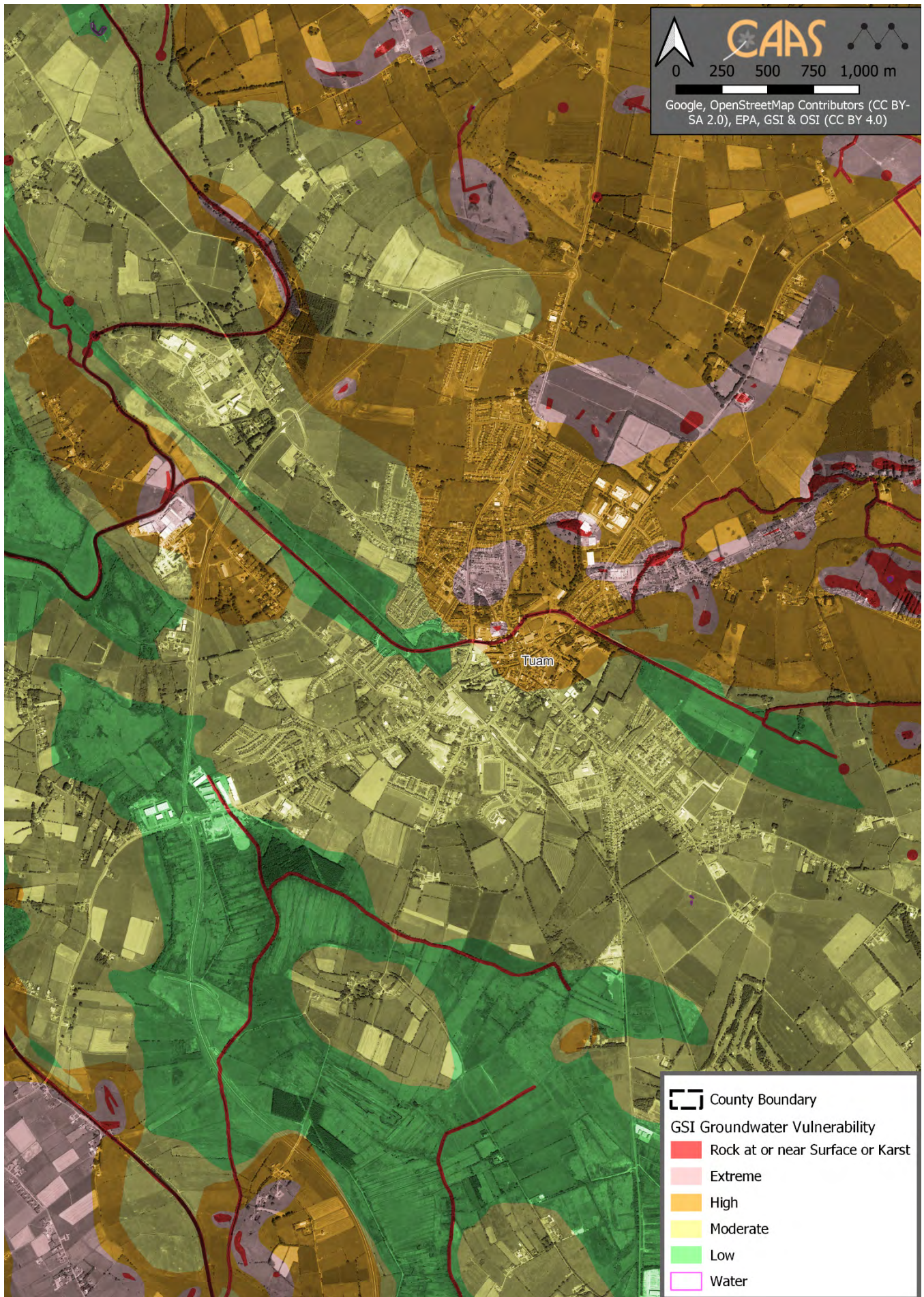




Figure 4.11 Aquifer Productivity



Figure 4.12 WFD RPA Drinking Water

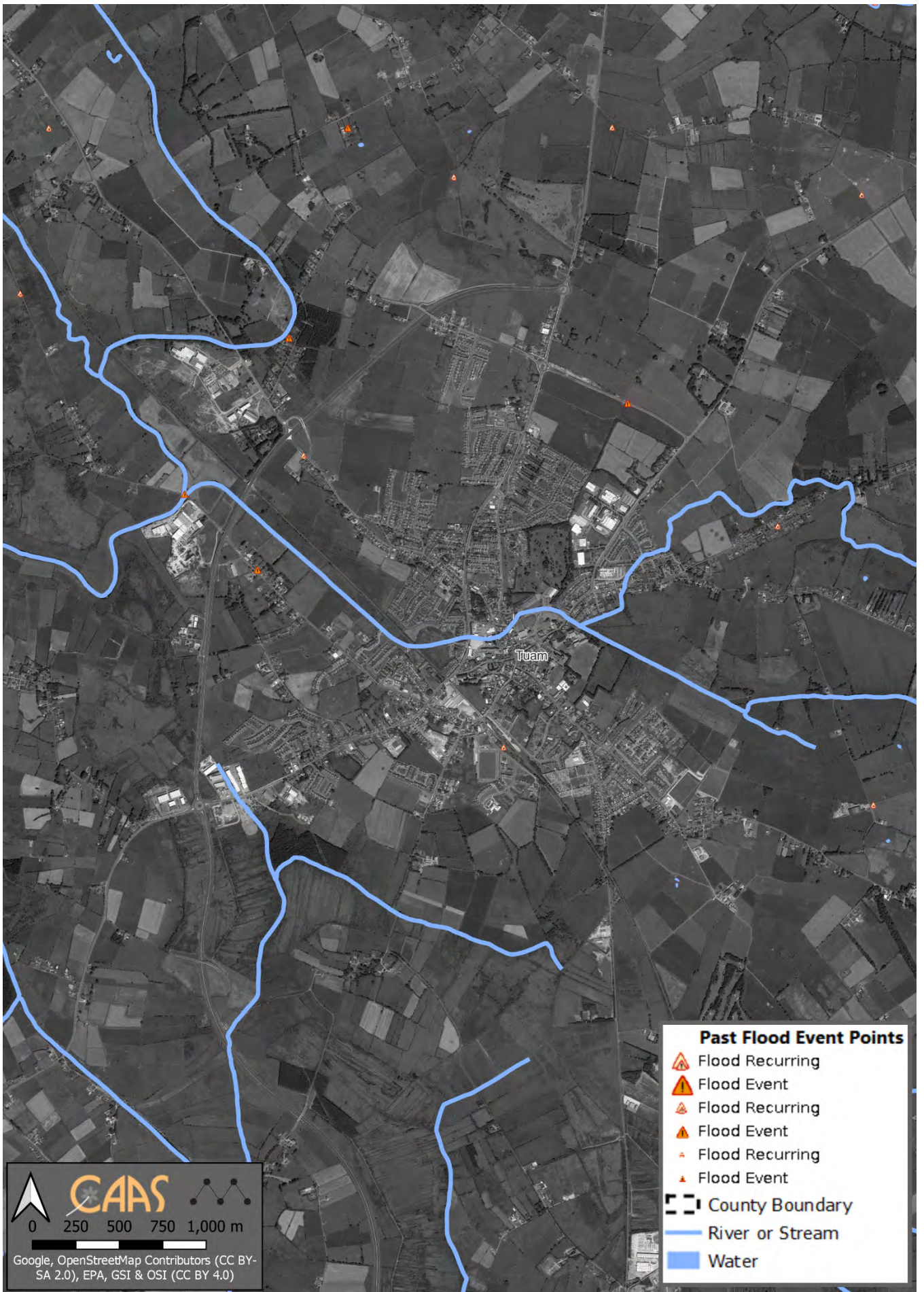


Figure 4.13 OPW Past Flood Events

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

Ireland's Provisional Greenhouse Gas Emissions 1990-2020 (EPA, 2021) report details provisional estimates of greenhouse gas emissions for the period 1990-2020. In 2020 total national greenhouse gas emissions are estimated to have declined by 3.6% on 2019 levels to 57.70 million tonnes carbon dioxide equivalent (Mt 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 CO₂eq 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 CO₂ 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.

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 at 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 Draft Plan facilitates a mode shift away from the private car to public transport, walking and cycling and provisions relating to electric vehicles. This will contribute towards reductions in the consumption of non-renewable energy sources and achievement of legally binding renewable energy targets.

The Renewable Energy Directive (Directive 2009/28/EC) requires each Member State to adopt a national renewable energy action plan (NREAP) to set out Member States' national targets for the share of energy from renewable sources consumed in transport, electricity and heating in 2020 that will ensure delivery of the overall renewable energy target. These sectoral targets are referred to

as RES-E (electricity), RES-T (transport) and RES-H (heat).

The overall target for Ireland in Directive 2009/28/EC was 16% share of renewable energy in Gross Final Consumption (GFC) by 2020. Under the Directive (2009/28/EC), Ireland was obliged to deliver 10% of transport energy by renewable sources by 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. However, since the mid-1990s import dependency had grown significantly, due to the increase in energy use together with the decline in indigenous natural gas production at Kinsale since 1995 and decreasing peat production. Ireland's overall import dependency reached 90% in 2006. It varied between 85% and 90% until 2016 when it fell to 69%. This trend reflects the fact that Ireland is not endowed with significant indigenous fossil fuel resources and has only in recent years begun to harness significant quantities of renewable resources and more recently natural gas from the Corrib field.

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.

4.10.5 Ambient Air Quality

In order to protect human health, vegetation and ecosystems, EU Directives set down air quality standards in Ireland and the other Member States for a wide variety of pollutants. These pollutants are generated through fuel combustion, in space heating, traffic, electricity generation and industry and, in sufficient amounts, could affect the well-being of the areas inhabitants. The EU Directives include details regarding how ambient air quality should be monitored, assessed and managed.

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

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

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 (PM_{2.5}).

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_x emissions. Of these, NO₂ is particularly impactful from a health perspective. The Draft Plan will help to facilitate reductions in emissions and a transition from dependence on fossil fuel combustion powered transport.

4.11 Material Assets

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

4.11.1 Public Assets and Infrastructure

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

4.11.2 Land

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

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/our-network/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.

4.11.6 Transport

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 Draft Tuam LAP 2023-2029

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

The provision of well-maintained quality waste water treatment infrastructure is essential to 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-treatment-capacity-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/090151b28084d77b.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.

³⁸ Capacity 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/developer-services/capacity-registers/water-supply-capacity-register/galway/> (Published in March 2022).

³⁹ Draft 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.

4.12 Cultural Heritage

4.12.1 Archaeological Heritage

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

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

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

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.

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

seabed or land covered by water to more clearly define and protect wreck sites and archaeological objects. Under the legislation all diving on known protected wreck sites or with the intention of searching for underwater cultural heritage is subject to licensing requirements.

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

4.12.2 Architectural Heritage

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

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

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

- The interior of the structure;
- The land lying within the 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 (ii).

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.

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.

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 Culture, Heritage and the Gaeltacht 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.

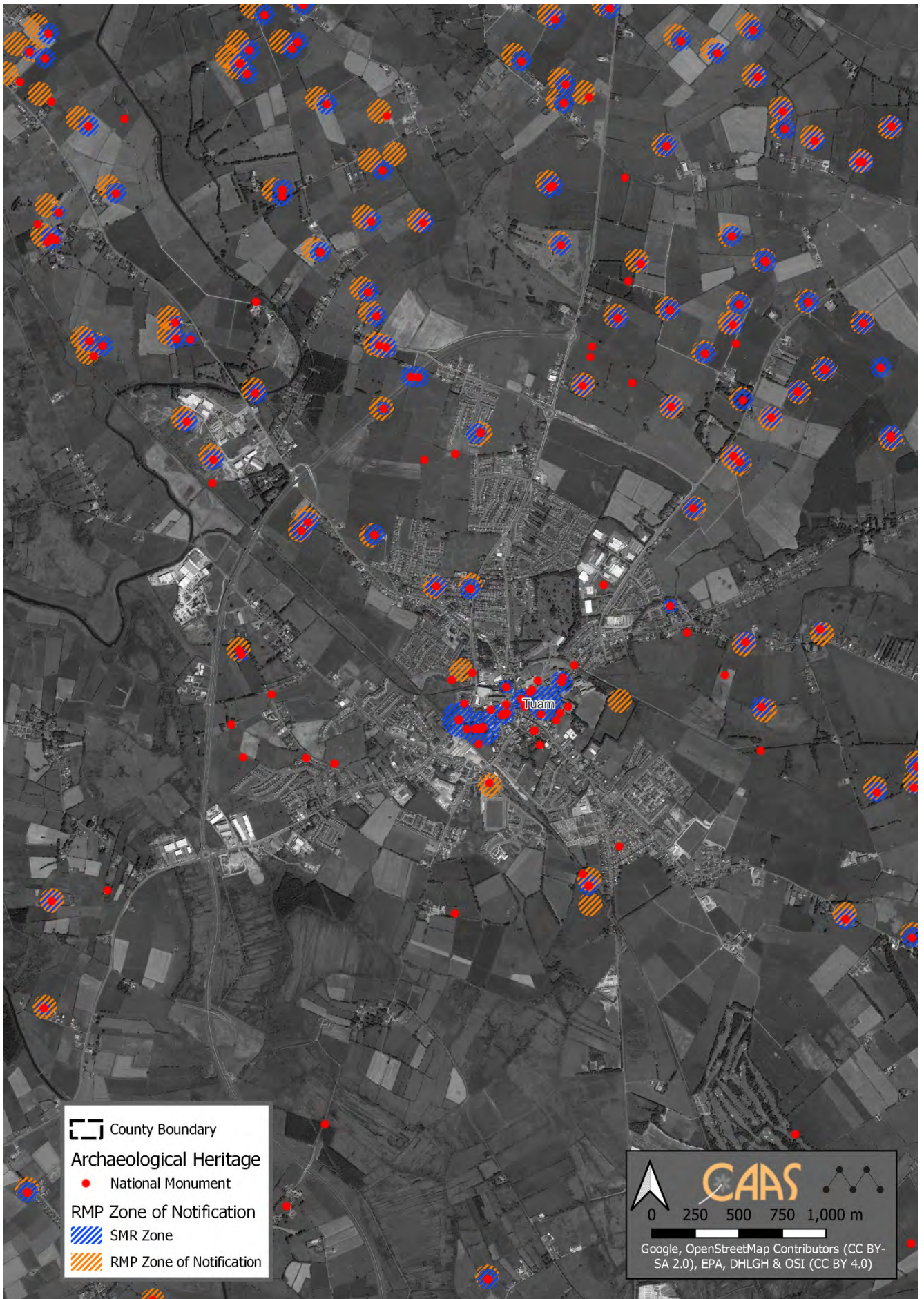


Figure 4.14 Archaeological Heritage



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.

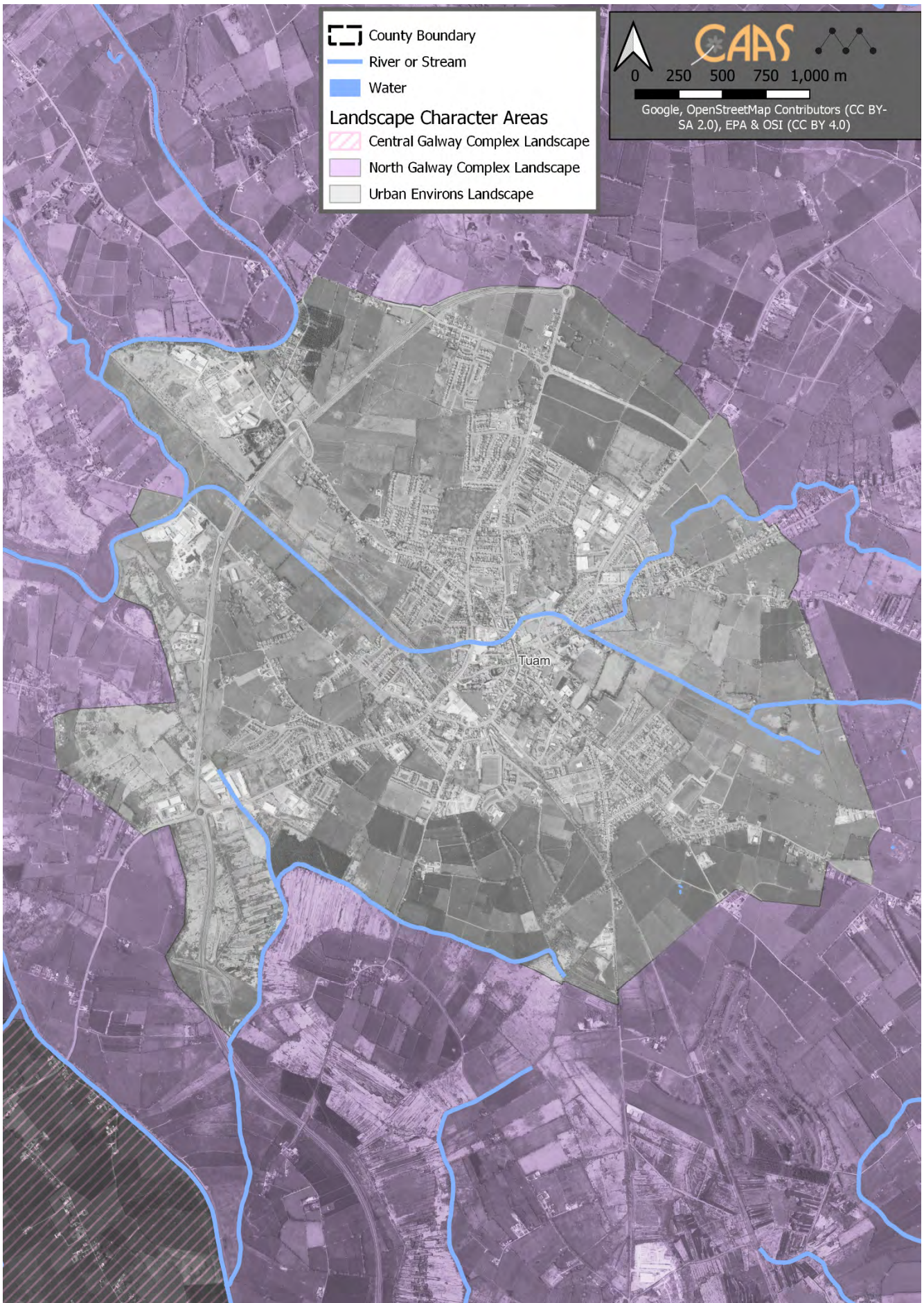


Figure 4.16 Landscape Designations



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 Draft Plan, the Proposed Material Alterations 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 Component	SEO Code	Guiding Principle	Strategic Environmental Objectives	Indicators	Targets
Biodiversity, Flora and Fauna	BFF	No net contribution to biodiversity losses or deterioration	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Condition of European sites 	<ul style="list-style-type: none"> 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
				<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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
				<ul style="list-style-type: none"> SEAs and AAs as relevant for new Council policies, plans, programmes etc. 	<ul style="list-style-type: none"> Screen for and undertake SEA and AA as relevant for new Council policies, plans, programmes etc.
				<ul style="list-style-type: none"> Status of water quality in the County's water bodies 	<ul style="list-style-type: none"> Included under Water below
				<ul style="list-style-type: none"> 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” 	<ul style="list-style-type: none"> 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 sustainable residential, working, educational and recreational environments	<ul style="list-style-type: none"> 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 environment-related pressures and risks to health and well-being 	<ul style="list-style-type: none"> Implementation of Plan measures relating to the promotion of economic growth as provided for by County Development Plan Chapter 5 “Economic, Enterprise and Retail” 	<ul style="list-style-type: none"> 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)
				<ul style="list-style-type: none"> Number of spatial concentrations of health problems arising from environmental factors resulting from development permitted under the Plan 	<ul style="list-style-type: none"> No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan
				<ul style="list-style-type: none"> Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures 	<ul style="list-style-type: none"> Increase in the proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures
				<ul style="list-style-type: none"> Number of spatial plans that include specific green infrastructure mapping 	<ul style="list-style-type: none"> Require all local level land use plans to include specific green infrastructure mapping

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Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives	Indicators	Targets
Soil (and Land)	S	Ensure the long-term sustainable management of land	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Proportion of population growth occurring on infill and brownfield lands compared to greenfield (also relevant to Material Assets) 	<ul style="list-style-type: none"> • 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
				<ul style="list-style-type: none"> • Instances where contaminated material generated from brownfield and infill must be disposed of 	<ul style="list-style-type: none"> • Dispose of contaminated material in compliance with EPA guidance and waste management requirements
				<ul style="list-style-type: none"> • Environmental assessments and AAs as relevant for applications for brownfield and infill development prior to planning permission 	<ul style="list-style-type: none"> • 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 of the water resource	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Status of water bodies as reported by the EPA Water Monitoring Programme for the WFD 	<ul style="list-style-type: none"> • 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
				<ul style="list-style-type: none"> • Number of incompatible developments permitted within flood risk areas 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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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Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives	Indicators	Targets
			<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures 	<ul style="list-style-type: none"> Increase in the proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures
Air	A	Support clean air policies that reduce the impact of air pollution on the environment and public health	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Proportion of journeys made by private fossil fuel-based car compared to 2016 National Travel Survey levels of 74% NO_x, SO_x, PM10 and PM2.5 as part of Ambient Air Quality Monitoring 	<ul style="list-style-type: none"> Decrease in proportion of journeys made by private fossil fuel-based car compared to 2016 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	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Implementation of Plan measures relating to climate reduction targets 	<ul style="list-style-type: none"> For review of progress on implementing Plan objectives to demonstrate successful implementation of measures relating to climate reduction targets
				<ul style="list-style-type: none"> A competitive, low-carbon, climate-resilient and environmentally sustainable economy 	<ul style="list-style-type: none"> Contribute towards transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050
				<ul style="list-style-type: none"> Share of renewable energy in transport 	<ul style="list-style-type: none"> 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 Relevant Proposed Material Alterations

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives	Indicators	Targets
				<ul style="list-style-type: none"> Carbon dioxide (CO₂) emissions across the electricity generation, built environment and transport sectors Energy consumption, the uptake of renewable options and solid fuels for residential heating Proportion of journeys made by private fossil fuel-based car compared to 2016 levels Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures 	<ul style="list-style-type: none"> 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 To promote reduced energy consumption and support the uptake of renewable options and a move away from solid fuels for residential heating Decrease in the proportion of journeys made by residents of the County using private fossil fuel-based car compared to 2016 levels Increase in the proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures
Cultural Heritage	CH	Safeguard cultural heritage features and their settings through responsible design and positioning of development	Protect places, features, buildings and landscapes of cultural, archaeological or architectural heritage	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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
				<ul style="list-style-type: none"> Percentage of entries to the Record of Protected Structures and Architectural Conservation Areas and their context protected from significant adverse effects arising from new development granted permission under the Plan 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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

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.

The Alternatives described for the Plan below are not affected by the Proposed Material Alterations.

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-modal hubs

- A. Provide new multi-modal hubs at optimum locations as identified by the Local Transport Plan.
- B. Provide new multi-modal 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.

Section 7 Evaluation of Alternatives

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 Objectives⁴⁵

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives
Biodiversity, Flora and Fauna	BFF	No net contribution to biodiversity losses or deterioration	<ul style="list-style-type: none"> • 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 Component	SEO Code	Guiding Principle	Strategic Environmental Objectives
Population and Human Health	PHH	Improve quality of life for all ages and abilities based on high-quality, serviced, well connected and sustainable residential, working, educational and recreational environments	<ul style="list-style-type: none"> 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 environment-related pressures and risks to health and well-being
Soil (and Land)	S	Ensure the long-term sustainable management of land	<ul style="list-style-type: none"> 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
Water	W	Protection, improvement and sustainable management of the water resource	<ul style="list-style-type: none"> 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	MA	Sustainable and efficient use of natural resources	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	C	Achieving transition to a competitive, low carbon, climate-resilient economy that is cognisant of environmental impacts	<ul style="list-style-type: none"> 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	CH	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
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7.3 Detailed Assessment of Alternatives

7.3.1 Effects Common to all Alternatives

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

Table 7.3 Effects Common to All Alternatives

Environmental Component	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated
Biodiversity and Flora and Fauna	<ul style="list-style-type: none"> • 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. 	<p>Arising from both construction and operation of development and associated infrastructure:</p> <ul style="list-style-type: none"> • Loss of/damage to biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species, listed species, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna; • Habitat loss, fragmentation and deterioration, including patch size and edge effects; and • Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species such as birds (e.g. swifts) and bats.
Population and Human Health	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Potential adverse effects arising from flood events. • Potential interactions if effects arising from environmental vectors.
Soil	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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 Component	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated
Water	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands (including those within and adjacent to the Plan area) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere in the Plan area and beyond. Contribution towards limits in increases in energy demand from the transport sector by facilitating sustainable compact growth. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Contribution towards climate mitigation and adaptation by facilitating compact development of lands (including those within and adjacent to the Plan area) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere in the Plan area and beyond. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Contributes towards protection of cultural heritage elsewhere by facilitating development within the Plan area. 	<ul style="list-style-type: none"> Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities.
Landscape	<ul style="list-style-type: none"> Contributes towards protection of wider landscape and landscape designations by facilitating development within the Plan area. 	<ul style="list-style-type: none"> 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 Proposed Material Alterations (MA38, MA49 and MA57) 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 Primarily Type 2 (i): "More Compact Development"; however, certain Proposed Material Alterations (PMA65, PMA68 and PMA69) would introduce elements of Type 2 (ii): "Less Compact Development")	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
	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"	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.

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 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	-	0
Type 3 (i) Low Carbon Corridors and Connections								
A. Support	PHH A C MA			PHH A C MA		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 cycling and walking capacity								
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-modal 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) Roadspace 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 L

Section 8 Evaluation of Draft Plan Provisions

8.1 Introduction

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

The Proposed Material Alterations (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 Proposed Material Alterations (and, in Section 7, the alternatives) are arrayed against each other in order to demonstrate which interactions would cause effects on specific components of the environment. Where the appraisal identifies an interaction with the status of an SEO the relevant SEO code is entered into the relevant column.

The interactions identified are reflective of likely significant environmental effects:

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

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

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

Table 8.1 Strategic Environmental Objectives⁴⁶

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives
Biodiversity, Flora and Fauna	BFF	No net contribution to biodiversity losses or deterioration	<ul style="list-style-type: none"> 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 and Human Health	PHH	Improve quality of life for all ages and abilities based on high-quality, serviced, well connected and sustainable residential, working, educational and recreational environments	<ul style="list-style-type: none"> 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 environment-related pressures and risks to health and well-being
Soil (and Land)	S	Ensure the long-term sustainable management of land	<ul style="list-style-type: none"> 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
Water	W	Protection, improvement and sustainable management of the water resource	<ul style="list-style-type: none"> 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	MA	Sustainable and efficient use of natural resources	<ul style="list-style-type: none"> 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

⁴⁶ See also Section 5

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives
Air	A	Support clean air policies that reduce the impact of air pollution on the environment and public health	<ul style="list-style-type: none"> 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	C	Achieving transition to a competitive, low carbon, climate-resilient economy that is cognisant of environmental impacts	<ul style="list-style-type: none"> 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	CH	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 -	No Likely interaction with status of SEOs 0
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8.2 Cumulative Effects⁴⁷

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, to which the Proposed Material Alterations relate, 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 2.6 (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;

⁴⁷ 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 of Draft Plan Provisions to which the Proposed Material Alterations Relate (from SEA Environmental Report February 2023)

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 Draft 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	Environmental Effects, in combination with the wider planning framework Effects include in-combination effects that are planned for through the wider planning framework including the NPF and associated NDP, the Western and Northern RSES, the Galway County Development Plan 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	<ul style="list-style-type: none"> 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-served 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. 	<p>Arising from both construction and operation of development and associated infrastructure:</p> <ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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

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Environmental Component	Environmental Effects, in combination with the wider planning framework			SEO Codes
	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	
Population and Human Health	<ul style="list-style-type: none"> • 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-served 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-served 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. 	<ul style="list-style-type: none"> • Potential adverse effects arising from flood events. • Potential interactions if effects arising from environmental vectors. 	<ul style="list-style-type: none"> • Potential interactions with residual effects on environmental vectors – please refer to residual adverse effects under “Soil”, “Water” and “Air and Climatic Factors” below. 	PHH
Soil	<ul style="list-style-type: none"> • 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-served 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. 	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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

SEA Environmental Report for Relevant Proposed Material Alterations

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.			SEO Codes
	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non-Significant Effects	
Water	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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

SEA Environmental Report for Relevant Proposed Material Alterations

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.			SEO Codes
	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non-Significant Effects	
Air and Climatic Factors	<ul style="list-style-type: none"> • 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-served 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: <ul style="list-style-type: none"> ○ 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. 	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • An extent of travel related greenhouse gas and other emissions to air. This has been mitigated by provisions which have been integrated into the Plan, including those relating to sustainable compact growth and sustainable mobility. • Interactions between noise emissions and sensitive receptors. Various provisions have been integrated into the Plan to ensure that noise levels at sensitive receptors will be minimised. 	AC
Cultural Heritage	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities. 	<ul style="list-style-type: none"> • Potential effects on known architectural and archaeological heritage and unknown archaeology however, these will occur in compliance with legislation. 	CH
Landscape	<ul style="list-style-type: none"> • Contributes towards protection of wider landscape and landscape designations by facilitating development within the Plan area. 	<ul style="list-style-type: none"> • Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape. 	<ul style="list-style-type: none"> • 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

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

The conclusion of the AA is that the Draft Plan will not affect the integrity of the European Sites, alone or in combination with other plans or projects.⁴⁸

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

The Proposed Material Alterations were subject to Screening for AA and it was determined that Stage 2 AA was not required for the Proposed Material Alterations. A Screening for AA Report accompanies this SEA Environmental Report.

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.

Strategic Flood Risk Assessment (SFRA) has informed this report. An SFRA document detailing changes to the original SFRA that was placed on public display alongside the Draft Plan on foot of submissions and providing more detail on the SFRA implications of Proposed Material Alterations is included as Appendix A to the SEA Screening document (which is Appendix II to this SEA Environmental Report).

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.

⁴⁸ Except as provided for in Article 6(4) of the Habitats Directive, viz. There must be:
(a) no alternative solution available,
(b) imperative reasons of overriding public interest for the plan to proceed; and
(c) adequate compensatory measures in place.

8.6 Interrelationship between Environmental Components

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

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

Table 8.4 Presence of Interrelationships between Environmental Components

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 66.

The Draft Plan, to which the Proposed Material Alterations relate, is situated in a hierarchy of documents setting out public policy for, among other things, land use planning, infrastructure, sustainable development, tourism, environmental protection and environmental management, such as the National Planning Framework, the National Development Plan, the National Mitigation Plan, the National Adaptation Framework, the Climate Action Plan, the Regional Spatial and Economic Strategy for the Western and Northern Region and the Galway County Development Plan 2022-2028 (for additional detail please refer to Section 2.6 “*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.

Proposed Material Alterations No's. ⁴⁹	Commentary	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 fully mitigated	No Likely interaction with status of SEOs
MA38 MA49 MA57	<p>The assessment of these alterations against Strategic Environmental Objectives (SEOs BFF, PHH, S, W, MA, A, C, CH and L) is consistent with the:</p> <ul style="list-style-type: none"> • 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. <p>These alterations would not provide the most evidence-based framework for development in compliance with the Core Strategy of the County Development Plan and therefore have the potential to undermine sustainable development and proper planning - with potential for associated unnecessary adverse environmental effects on various environmental components.</p> <p>These Proposed Material Alterations would contribute towards an exceedance of the core strategy allocation for Tuam from the County Development Plan in locations that are beyond the Draft Plan boundary. Given the deviation from County Development Plan allocations and the locations of the areas proposed to be zoned, development at these locations would conflict with established higher-level objectives relating to compact growth, sustainable mobility and transition to a low carbon and climate resilient society. As detailed under Section 7 of this report, the selected Land Use Zoning alternative for the Plan, if the Proposed Material Alterations are adopted, would primarily be Type 2 (i): “More Compact Development”; however, certain Proposed Material Alterations (MA38, MA49 and MA57) would introduce elements of Type 2 (ii): “Less Compact Development”.</p>	+	-	BFF PHH S W MA A C CH L	0
MA9 MA39 MA50 MA51 MA55 MA56	<p>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.</p> <p>MA39, MA50, MA51, MA55 and MA56 propose zoning that would not be considered compatible to complying with the Flood Risk Management Ministerial Guidelines.</p> <p>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.</p>			BFF PHH S W MA C	A CH L

⁴⁹ For detail on Proposed Material Alterations please refer to Proposed Material Alterations document.

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. These measures also apply to Proposed Material Alterations. Various environmental sensitivities and issues have been communicated to the Council through the SEA, Appropriate Assessment (AA) and Strategic Flood Risk Assessment (SFRA) processes. By integrating all related recommendations into the Plan, the Council have ensured that both the beneficial environmental effects of implementing the Plan have been and will be maximised and that potential adverse effects have been and will be avoided, reduced or offset.

Mitigation as part of the Draft Plan preparation/SEA process was achieved through:

- Strategic work undertaken by the Council to ensure contribution towards environmental protection and sustainable development;
- Considering alternatives for the Plan, to which the Proposed Material Alterations relate;
- The integration of environmental considerations into zoning provisions of the Plan, to which the Proposed Material Alterations relate;
- The integration of individual SEA, AA and SFRA provisions into the text of the Plan, to which the Proposed Material Alterations relate; 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 Draft Plan, to which the Proposed Material Alterations relate.

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

9.4 Integration of environmental considerations into Zoning of the Plan

Environmental considerations, including those relating to ecology, cultural heritage, landscape and water, were integrated into the Draft 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 Draft 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 Draft Plan

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

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

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

In addition to the individual provisions integrated into the text of the Draft Local Area Plan, individual provisions relating to environmental protection and management have been integrated into the existing 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. These measures also apply to Proposed Material Alterations.

9.7 Consideration of Further Modification

1. The following further modification could be considered with respect to MA9, which relates to land use zoning under MA39, MA50, MA51, MA55 and MA56 (further modification to be considered – additional text in green, text to be omitted in red-strikethrough):
 - To update the meaning of the “BE – Business and Enterprise” land use zoning objective by adding the following to the “General Notes on Land Use Zoning Matrix” under Table 1.6.1 “Land Use Matrix”:

12. Uses “Permitted in Principle” and “Open to Consideration” for Lands zoned “BE – Business and Enterprise” shall be limited in areas, 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
- ~~would not pass the Plan Making Justification Test. Furthermore, the Plan Making Justification Test is unsuitable for assessing Business and Enterprise zoned lands, which are not consistent with the condition that any lands justified are essential in achieving compact and sustainable urban growth. Consequently, developments on lands zoned “BE-Business and Enterprise” shall be limited as per the requirements of Policy Objective V Constrained Land Use.~~

~~These~~ ~~This~~ limitations shall take primacy over any related provision relating to the land use zoning matrix.

- ~~● To update the meaning of the “I-Industrial” land use zoning objective by adding the following to the “General Notes on Land Use Zoning Matrix” under Table 1.6.1 “Land Use Matrix” of the Plan~~

~~13. Lands zoned “I-Industrial” would not pass the Plan Making Justification Test. Furthermore, the Plan Making Justification Test is unsuitable for assessing Industrial zoned lands, which are not consistent with the condition that any lands justified are essential in achieving compact and sustainable urban growth. Consequently, developments on lands zoned “I-Industrial” shall be limited as per the requirements of Policy Objective TKT 41 Constrained Land Use.~~

~~This limitation shall take primacy over any related provision relating to the land use zoning matrix~~

2. The following further modification could be considered with respect to MA8, which would relate to land use zoning under MA50 and MA51, MA55 and MA56 (further modification to be considered – additional text in green, text to be omitted in red strikethrough):

- To update text in the Land Use Matrix Table by adding the following to the “General Notes on Land Use Zoning Matrix” under Table 1.6.1 “Land Use Matrix” of the Plan.

11. Insert Asterix under all 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.

Table 9.1 Integration of Environmental Considerations into the Draft Plan and the County Development Plan

Topic	Potentially Significant Adverse Effect, if Unmitigated	Draft Local Area Plan measures, including ⁵⁰ :	Existing Galway County Development Plan 2022-2028 measures, including:
Various – see below	Various – see below	<p>Strategic 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. 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.</p> <p>TKT 2 Service Led Development Development under the plan shall be preceded by sufficient capacity in the public wastewater infrastructure and potable water infrastructure.</p> <p>TKT 3 Environmental Assessment To require the preparation and assessment of all planning applications in the plan area to have regard to the information, data and requirements of the Appropriate Assessment Natura Impact Report, SEA Environmental Report and Strategic Flood Risk Assessment Report that accompany this LAP.</p> <p>TKT 5 Residential Development Phasing Support the development of lands designated as Residential (Phase 1) within the lifetime of the plan, subject to normal planning, access and servicing requirements, and reserve the lands designated as Residential (Phase 2) for the longer-term growth needs of Tuam. Residential (Phase 2) lands are generally not developable for housing within the lifetime of this plan, with the exception of the following developments, which may be considered by the Planning Authority, subject to a suitable evidence based case being for the proposal: (refer to Draft Plan for more detail)</p> <p>TKT 6 Residential Infill Development Within the town centre, small scale limited infill housing development will be considered on appropriate sites. These infill sites shall have regard to the existing character of the street, respecting the existing building line, scale, proportions, layout, heights and materials of surrounding developments. A proposed site must have a</p>	<p>MM1 Monitoring. The Council shall, in conjunction with the Regional Assembly and other sources as relevant, implement the monitoring programme as set out in the SEA Environmental Report and Statement. This will include the preparation of stand-alone SEA Monitoring Reports:</p> <ol style="list-style-type: none"> To accompany the report required of the manager under section 15(2) of the Act, including information in relation to progress on, and the results of, monitoring the significant environmental effects of implementation of the Development Plan On the significant environmental effects of implementing the Plan, in advance of the beginning of the review of the next Plan. <p>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; and Stage 2 – Route Identification, Evaluation and Selection.</p> <p>WM 5 Construction and Environmental Management Plans. Construction Environment Management Plans shall be prepared in advance of the construction of relevant projects and implemented throughout. Such plans shall incorporate relevant mitigation measures which have been integrated into the Plan and any lower tier Environmental Impact Statement or Appropriate Assessment. CEMPs typically provide details of intended construction practice for the proposed development, including:</p> <ol style="list-style-type: none"> location of the sites and materials compound(s) including area(s) identified for the storage of construction refuse; location of areas for construction site offices and staff facilities; details of site security fencing and hoardings; details of on-site car parking facilities for site workers during the course of construction; details of the timing and routing of construction traffic to and from the construction site and associated directional signage; measures to obviate queuing of construction traffic on the adjoining road network; measures to prevent the spillage or deposit of clay, rubble or other debris; 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 site development works; details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels; containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained (such bunds shall be roofed to exclude rainwater); disposal of construction/demolition waste and details of how it is proposed to manage excavated soil, including compliance with 2006 Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects, Department of the Environment, Heritage and Local Government; 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. <p>WM 6 Waste Management. To continue to meet the duties under the Waste Management (certification of historic unlicensed waste disposal and recovery activity) Regulations 2008, including those in relation to the identification and registration of closed landfills.</p> <p>WM7 Recycling Infrastructure. To provide for the provision of recycling infrastructure throughout the county where it is considered necessary and support the provision of additional recycling infrastructure throughout the county.</p> <p>WM 8 Sustainable Waste Management Practices. Promote and facilitate communities to become involved in environmental awareness activities and community based recycling initiatives or environmental management initiatives that will lead to local sustainable waste management practices.</p> <p>WM 9 Separate Collection of Waste. Encourage and support the provision of separate collection of waste in accordance with the requirements of the Waste Management (Food Waste) Regulations 2009, the Waste Framework Directive Regulations, 2011 and other relevant legislation.</p> <p>MAS 1 Separation Distances from SEVESO Sites. To ensure that appropriate distances are maintained between any proposed development and any existing Seveso II establishment, in the interest of the health and safety of the occupiers of the proposed development.</p> <p>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 involving hazardous substances and safeguard both the public and the environment.</p> <p>MAS 3 SEVESO III Sites. Take into account the provisions of the Major Accidents Directive, relating to the control of major accident hazards involving dangerous substances, and the recommendations of the Health and Safety Authority in the assessment of all planning applications located within the consultation distance of such sites.</p> <p>TI 4 Tourism and Infrastructure Capacity. The potential environmental effects of a likely increase in tourists/tourism-related traffic volumes in particular locations/along particular routes shall be considered and mitigated as appropriate. Such a consideration should include potential impacts on existing infrastructure (including drinking water, wastewater, waste and transport) resulting from tourism proposals. Galway County Council will support</p>

⁵⁰ To be updated to take account of Proposed Material Alterations and any Further Modifications, in advance of Plan adoption.

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Topic	Potentially Significant Adverse Effect, if Unmitigated	Draft Local Area Plan measures, including ⁶⁰ :	Existing Galway County Development Plan 2022-2028 measures, including:
		<p>safe means of access and egress and comply with development management standards for new dwellings.</p> <p>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.</p> <p>TKT 8 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 Planning Authority do not contribute to the vitality and viability of the town centre.</p> <p>TKT 15 Tourism Development Encourage and assist in the development of</p>	<p>Irish Water and Fáilte Ireland to ensure that tourism is serviced by adequate and appropriate water services infrastructure.</p> <p>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.</p> <p>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 wetlands are not compromised by inappropriate development.</p> <p>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.</p> <p>(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.</p> <p>MCC 3 Protection of Coastal Area. It is a policy objective to protect the Coastal Area through the following measures: (a) Ensure that conservation works undertaken in coastal areas are in accordance with best practice and measures to protect the coast, the coastal edge and coastal habitats are supported; (b) Seek to prevent the unauthorised removal of sand and related beach material; (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 and Green Coasts and to increase the number of beaches and coasts holding this status in the future; (d) Facilitate an Integrated Coastal Zone Management approach to ensure the conservation, management and protection of man-made and natural resources of the coastal zone;</p> <p>MCC 4 Integrated Framework Management Plan. Support the preparation of an Integrated Galway Bay Framework Management Plan by all relevant stakeholders to provide for the sustainable and integrated development of the Galway Bay Area in a co-ordinated manner</p> <p>GICT 3 Tourism Development within An Gaeltacht 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 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 manage any increase in visitor numbers in order to avoid significant effects including loss of habitat and disturbance and ensuring that any new projects, such as greenways, are developed at suitable locations.</p> <p>AD1 Sustainable Agriculture Practices. To facilitate the development of sustainable agricultural practices and facilities within the county, subject to complying with best practice guidance, normal planning and environmental criteria and the development management standards in Chapter 15 Development Management and Standards.</p> <p>AD3 Modernisation of Agriculture Buildings. To facilitate the modernisation of agriculture and to encourage best practice in the design and construction of new agricultural buildings and installations to protect the environment, natural and built heritage and residential amenity.</p>

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Topic	Potentially Significant Adverse Effect, if Unmitigated	Draft Local Area Plan measures, including ⁶⁰ :	Existing Galway County Development Plan 2022-2028 measures, including:
		<p>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.</p> <p>TKT 24 Tuam Regeneration Masterplan It is a policy objective of Galway County Council to support and facilitate the implementation of the Tuam Regeneration Masterplan.</p> <p>TKT 57 Development Management Standards and Guidelines Ensure that the general development management standards and guidelines set out in the current <i>Galway County Development Plan 2022-2028</i>, 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 proposals in the plan area.</p>	
<p>Biodiversity and flora and fauna</p>	<p>Arising from both construction and operation of development and associated infrastructure:</p> <ul style="list-style-type: none"> 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. 	<p>TKT 14 Open Space/ Recreation & Amenity Promote the sustainable management, use and/or development, as appropriate, of open space/recreation and amenity lands. This will include:</p> <ul style="list-style-type: none"> 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. <p>TKT 15 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</p>	<p>Also refer to detailed measures for settlements contained in Volume 2 of the Plan.</p> <p>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.</p> <p>LP 2 Lighting and Climate Action. To require the use of low energy LED (or equivalent) lighting in support of Climate Action.</p> <p>LP 3 Dark Skies. To encourage the maintenance of dark skies in rural areas and to limit light pollution in urban and rural areas.</p> <p>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 sites (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.</p> <p>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.</p> <p>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.</p> <p>F5 Deforestation. To promote the avoidance of deforestation or commercial afforestation within European sites unless directly relating to the management of the site for its qualifying interests.</p> <p>MEQ2 "Protection of the Environment. The Council shall require the following in relation to the management of authorised aggregate extraction</p> <p>(a) All quarries shall comply with the requirements of the EU Habitats Directive, the Planning and Development (Amendment) Act 2010 and by the guidance as contained within the DoEHLG Quarries and Ancillary Facilities Guidelines 2004, the EPA Guidelines 'Environmental Management in the Extractive Industry: Non Scheduled Minerals 2006 (including any updated/superseding documents) and to DM Standard 21 of this Development Plan;</p> <p>(b) Require development proposals on or in the proximity of quarry sites, to carry out appropriate investigations into the nature and extent of old quarries (where applicable). Such proposals shall also investigate the nature and extent of soil and groundwater contamination and the risks associated with site development works together with appropriate mitigation;</p> <p>(c) Require Development Proposals to assess the potential impact of extraction in areas where geo-morphological interest, groundwater and important aquifers, important archaeological features and Natural Heritage Areas are located;</p> <p>d) Have regard to the Landscape Character Assessment of the County and its recommendations;</p> <p>(e) Ensure that any quarry activity has minimal adverse impact on the road network and that the full cost of road improvements, including during operations and at time of closure, which are necessary to facilitate those industries are borne by the industry itself.</p> <p>(f) Ensure that the extraction of minerals or aggregates does not adversely impact on residential or environmental amenity;</p> <p>(g) Protect all known un-worked deposits from development that might limit their scope for extraction."</p> <p>NHB 1 Natural Heritage and Biodiversity of Designated Sites, Habitats and Species. Protect and where possible enhance the natural heritage sites designated under EU Legislation and National Legislation (Habitats Directive, Birds Directive, European Communities (Birds and Natural Habitats)</p>

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Topic	Potentially Significant Adverse Effect, if Unmitigated	Draft Local Area Plan measures, including ⁵⁰ :	Existing Galway County Development Plan 2022-2028 measures, including:
	<p>swifts) and bats.</p>	<p>heritage and biodiversity and its local amenities.</p> <p>TKT 40 European Sites Protect European sites that form part of the European Sites network (including Special Protection Areas and Special Areas of Conservation) in accordance with the 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 Draft Plan for more detail)</p> <p>TKT 56 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 <i>Forestry Act, 1946</i> (as amended). (c) Carry out a tree survey on important tree stands within the plan area by suitably qualified personnel.</p>	<p>Regulations 2011 and Wildlife Acts) and extend to any additions or alterations to sites that may occur during the lifetime of this plan. Protect and, where possible, enhance the plant and animal species and their habitats that have been identified under European legislation (Habitats and Birds Directive) and protected under national Legislation (European Communities (Birds and Natural Habitats) Regulations 2011 (SI 477 of 2011), Wildlife Acts 1976-2010 and the Flora Protection Order (SI 94 of 1999). Support the protection, conservation and enhancement of natural heritage and biodiversity, including the protection of the integrity of European sites, that form part of the Natura 2000 network, the protection of Natural Heritage 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 green/ ecological network."</p> <p>NHB 2 European Sites and Appropriate Assessment. To implement Article 6 of the Habitats Directive and to ensure that Appropriate Assessment is carried out in relation to works, plans and projects likely to impact on European sites (SACs and SPAs), whether directly or indirectly or in combination with any other plan(s) or project(s). All assessments must be in compliance with the European Communities (Birds and Natural Habitats) Regulations 2011. All such projects and plans will also be required to comply with statutory Environmental Impact Assessment requirements where relevant.</p> <p>NHB 3 Protection of European Sites. No plans, programmes, or projects etc. giving rise to significant cumulative, direct, indirect or secondary impacts on European sites arising from their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted on the basis of this Plan (either individually or in combination with other plans, programmes, etc. or projects.*</p> <p>NHB 4 Ecological Appraisal of Biodiversity. Ensure, where appropriate, the protection and conservation of areas, sites, species and ecological/networks of biodiversity value outside designated sites. Where appropriate require an ecological appraisal, for development not directly connected with or necessary to the management of European Sites, or a proposed European Site and which are likely to have significant effects on that site either individually or cumulatively.</p> <p>NHB 5 Ecological Connectivity and Corridors. Support the protection and enhancement of biodiversity and ecological connectivity in non-designated sites, including woodlands, trees, hedgerows, semi-natural grasslands, rivers, streams, natural springs, wetlands, stonewalls, geological and geomorphological systems, other landscape features and associated wildlife areas where these form part of the ecological network and/or may be considered as ecological corridors in the context of Article 10 of the Habitats Directive.</p> <p>NHB 6 Implementation of Plans and Strategies. Support the implementation of any relevant recommendations contained in the National Heritage Plan 2030, the National Biodiversity Plan, the All Ireland Pollinator Plan and the National Peatlands Strategy and any such plans and strategies during the lifetime of this plan.</p> <p>NHB 7 Mitigation Measures. Require mitigating measures in certain cases where it is evident that biodiversity is likely to be affected. These measures may, in association with other specified requirements, include establishment of wildlife areas/corridors/parks, hedgerow, tree planting, wildflower meadows/marshes and other areas. With regard to residential development, in certain cases, these measures may be carried out in conjunction with the provision of open space and/or play areas.</p> <p>NHB 8 Increased Awareness of the County's Biodiversity and Natural Heritage. Facilitate increased awareness of the County's biodiversity and natural heritage through the provision of information to landowners and the community generally, in cooperation with statutory and other partners.</p> <p>NHB 9 Protection of Bats and Bats Habitats. Seek to protect bats and their roosts, their feeding areas, flight paths and commuting routes. Ensure that development proposals in areas which are potentially important for bats, including areas of woodland, linear features such as hedgerows, stonewalls, watercourses and associated riparian vegetation which may provide migratory/foraging uses shall be subject to suitable assessment for potential impacts on bats. This will include an assessment of the cumulative loss of habitat or the impact on bat populations and activity in the area and may include a specific bat survey. Assessments shall be carried out by a suitably qualified professional and where development is likely to result in significant adverse effects on bat populations or activity in the area, development will be prohibited or require mitigation and/or compensatory measures, as appropriate. The impact of lighting on bats and their roosts and the lighting up of objects of cultural heritage must be adequately assessed in relation to new developments and the upgrading of existing lighting systems.</p> <p>NHB 10 NPWS & Integrated Management Plans. Article 6(1) of the Habitats Directive requires that Member States establish the necessary conservation measures for European sites involving, if need be, appropriate management plans specifically designed for the sites or integrated into other development plans. The NPWS's current priority is to identify site specific conservation objectives; management plans may be considered after this is done. Where Integrated Management Plans are being prepared by the NPWS for European sites (or parts thereof), the NPWS shall be engaged with in order to ensure that plans are fully integrated with the Plan and other plans and programmes, with the intention that such plans are practical, achievable and sustainable and have regard to all relevant ecological, cultural, social and economic considerations, including those of local communities.</p> <p>NHB 11 Increases in Visitor Numbers to Semi-Natural Areas, Visitor and Habitat Management. Seek to manage any increase in visitor numbers in order to avoid significant effects including loss of habitat and disturbance, including ensuring that any new projects, such as greenways, are a suitable distance from ecological sensitivities, such as riparian zones. Where relevant, the Planning Authority and those receiving permission for development under the Plan shall seek to manage any increase in visitor numbers and/or any change in visitor behaviour in order to avoid significant effects, including loss of habitat and disturbance. Management measures may include ensuring that new projects and activities are a suitable distance from ecological sensitivities. Visitor/Habitat Management Plans will be required for proposed projects as relevant and appropriate.</p> <p>WTWF 1 Wetland Sites 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</p>

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			<p>International Importance (especially as Waterfowl Habitat).</p> <p>P 1 Protection of Peatlands. Ensure that peatland areas which are designated (or proposed for designation) as NHAs, SACs or SPAs are conserved for their ecological, climate regulation, education and culture, archaeological potential including any ancient walkways (toghers) through bogs.</p> <p>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.</p> <p>P3 Framework Plans. Seek to support relevant agencies such as Bord na Mona in advancing rehabilitation works for the peatlands and related infrastructure, to provide for the future sustainable and environmentally sensitive use of peatlands sites including for amenity purposes.</p> <p>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.</p> <p>IS 2 Invasive Species Management Plan. Ensure that proposals for development do not lead to the spread or introduction of invasive species. If 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.</p> <p>PO 1 Delivery of All Ireland Pollinator Plan</p> <p>To facilitate the delivery of the All Ireland Pollinator Plan where possible. In the interest of preserving and enhancing biodiversity and working in 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 the majority of this planting should consist of native plants.</p> <p>TWHS 1 Trees, Hedgerows, Natural Boundaries and Stone Walls</p> <p>Protect and seek to retain important trees, tree clusters and tree boundaries, ancient woodland, natural boundaries including stonewalls, existing 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 are suitable for the specific site and use suitable native variety of trees of Irish provenance and hedgerows of native species. Seek Tree Management Plans to ensure that trees are adequately protected during development and incorporated into the design of new developments.</p> <p>TWHS 2 Planting of Trees and Woodlands</p> <p>Encourage and promote in co-operation with Coillte and the Department of Agriculture, Food and the Marine and other organisations, the planting of 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.</p> <p>TWHS 3 Protection of Forestry</p> <p>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.</p> <p>BMSP 8 Jetty/Marina Development.</p> <p>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 comply with the European Habitats Directive</p> <p>CT 2 Water Sports</p> <p>To encourage the development of coastal tourism in areas such as water-sports and water-related activities and events subject to normal planning and environmental criteria</p> <p>CT3 Tourism Development</p> <p>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.</p> <p>CT 4 Blue Flags</p> <p>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.</p> <p>CT 5 Tourism Products</p> <p>To support the protection and enhancement of our islands, coastline and waterways as tourism products and attractions, subject to community and environmental carrying capacity.</p> <p>HT 3 Sustainable Tourism Industry</p> <p>To support the development of a more sustainable tourism industry which minimises adverse impacts on local communities, the built heritage, landscapes, habitats and species; leaving them undiminished as a resource for future generations, while supporting social and economic prosperity.</p> <p>GICT 3 Tourism Development within An Ghaeltacht and Islands</p> <p>(a) Encourage and facilitate the development of the tourism potential of the Gaeltacht and Islands in a manner that respects, builds on, protects and enhances the cultural, built and natural heritage and local amenities of the area;</p>

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Topic	Potentially Significant Adverse Effect, if Unmitigated	Draft Local Area Plan measures, including ⁵⁰ :	Existing Galway County Development Plan 2022-2028 measures, including:
			<p>(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 manage any increase in visitor numbers in order to avoid significant effects including loss of habitat and disturbance and ensuring that any new projects, such as greenways are developed at suitable locations.</p> <p>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.</p>
<p>Population and human health</p>	<ul style="list-style-type: none"> • Potential adverse effects arising from flood events. • Potential interactions if effects arising from environmental vectors. 	<p>Also refer to measures under other environmental components including Soil, Water and Air and Climatic Factors.</p> <p>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.</p>	<p>Also refer to measures under other environmental components including Soil, Water and Air and Climatic Factors.</p> <p>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 and Cleaner Air for Europe (CAFÉ) Directive (2008/50/EC) and ensure that all air emissions associated with new developments are within Environmental Quality Standards as set out in the Air Quality Standards Regulations 2011 (SI No. 180 of 2011) (or any updated/superseding documents).</p> <p>AQ 2 Assessment of Air Quality 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.</p> <p>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.</p> <p>AQ 4 Air Purification Galway County Council shall encourage landscaping and deciduous tree planting in an environmentally sensitive manner within towns and villages as a means of air purification, the filtering of suspended particles and the improvement of their micro-climate.</p> <p>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 Regulations (including any updated/superseding Regulations that may be published within the lifetime of this Development Plan).</p> <p>NP 1 Galway County Council Noise Action Plan 2019-2023 To implement the Galway County Council Noise Action Plan 2019-2023 (and any subsequent Plan) in order to avoid, prevent and reduce the harmful effects, including annoyance, due to environmental noise exposure.</p> <p>NP 2 Developments within Noise Maps (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 from environmental noise.</p> <p>NP3 Noise Impact Assessments To require an assessment of impact of the development on noise levels, having regard to the provisions of the Environmental Protection Agency Acts 1992 and 2003 and the EPA Noise Regulations 1994 when assessing planning application.</p> <p>NP 4 Noise Pollution and Regulation Restrict development proposals causing noise pollution in excess of best practice standards and regulate and control activities likely to give rise to excessive noise, other than those activities which are regulated by the EPA</p> <p>NP 5 Noise Mitigation Measures Require activities likely to give rise to excessive noise to install noise mitigation measures and monitors. The provision of a noise audit may be required where appropriate.</p> <p>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.</p> <p>MAS 1 Separation Distances from SEVESO Sites To ensure that appropriate distances are maintained between any proposed development and any existing Seveso II establishment, in the interest of the health and safety of the occupiers of the proposed development.</p> <p>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 involving hazardous substances and</p>

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			<p>safeguard both the public and the environment.</p> <p>MAS 3 SEVESO III Sites</p> <p>Take into account the provisions of the Major Accidents Directive, relating to the control of major accident hazards involving dangerous substances, and the recommendations of the Health and Safety Authority in the assessment of all planning applications located within the consultation distance of such sites.</p>
Soil	<ul style="list-style-type: none"> 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. 	<p>Also refer to measures under other environmental components including Water.</p>	<p>Also refer to measures under other environmental components including Water.</p> <p>SQ 1 Soil Impact Assessments</p> <p>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.</p> <p>SQ 2 Soil Protection Measures</p> <p>To ensure that adequate soil protection measures are undertaken where appropriate.</p> <p>SQ 3 Soil Protection, Contamination and Remediation</p> <p>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.</p> <p>PG 1 Geological and Geo-Morphological Systems</p> <p>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.</p> <p>PG 2 Geological Heritage of County Galway</p> <p>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).</p> <p>PG 3 Promotion of and Access to Geological Sites</p> <p>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.</p> <p>ESK 1 Protection of Eskers Systems</p> <p>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.</p> <p>ESK 2 Esker Areas</p> <p>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.</p> <p>UGG 1 UNESCO Global Geopark Status.</p> <p>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 Cliffs of Moher UNESCO Global Geopark that relate to the county.</p>
Water	<ul style="list-style-type: none"> 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. 	<p>Also refer to measures under other environmental components including Soil and Material Assets.</p> <p>TKT 14 Open Space/ Recreation & Amenity</p> <p>Promote the sustainable management, use and/or development, as appropriate, of open space/recreation and amenity lands. This will include:</p> <ul style="list-style-type: none"> - Development of open spaces, sport and recreational activities, in accordance with 	<p>Also refer to measures under other environmental components including Soil and Material Assets.</p> <p>RH 11 Waste Water Treatment provision.</p> <p>Provide for sustainable rural housing in the county in accordance with the EPA Code of Practice: Wastewater Treatment Systems for Single Houses (2009).</p> <p>AD4 Agriculture Waste.</p> <p>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.</p> <p>WS 1 Enhancement of Water Supply Infrastructure</p> <p>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.</p>

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Topic	Potentially Significant Adverse Effect, if Unmitigated	Draft Local Area Plan measures, including ⁶⁰ :	Existing Galway County Development Plan 2022-2028 measures, including:
	<ul style="list-style-type: none"> Increase in flood risk and associated effects associated with flood events. 	<p>best practice and on appropriate lands with suitable levels of access to local community;</p> <ul style="list-style-type: none"> 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. <p>TKT 41 Constrained Land Use To facilitate the appropriate management and sustainable use of Flood Risk within the zoning plan area. This zoning indicates where the Plan Making Justification Test may need to be applied and as such can limit new development, while recognising that existing development uses within these zones may require small scale development, as outlined below, over the life of the Local Area Plan, which would contribute towards the compact and sustainable urban development of the town. The underlying zoning or the existing permitted uses may be deemed to be acceptable in principle, however within Flood Zone A/B development is typically limited to extensions, renovations and change of use. Infill highly vulnerable development and demolition and reconstruction can only take place in Flood Zone C. Less vulnerable development in Flood Zone B will also need to be considered carefully. These aspects are assessed on a case by case basis under the application of the Plan Making Justification Test and as supported by specific objectives in the written statement. Where the Justification Test is passed there is also a requirement for a detailed Flood Risk Assessment at Development Management stage. The FRA should be carried out in accordance with The Planning System and Flood Risk Assessment Guidelines and Circular PL 2/2014 (or as updated), which shall assess the risks of flooding associated with the proposed development. Specifications for developments in flood vulnerable areas set out in this plan shall be</p>	<p>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 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.</p> <p>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.</p> <p>WS 4 Requirement to Liaise with Irish Water – Water Supply 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.</p> <p>WS 5 Private Water Supply 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."</p> <p>WS 6 Water Framework Directive 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.</p> <p>WS 7 Water Quality 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.</p> <p>WS 8 Proliferation of Septic Tanks Encourage the use of high standard treatment plants to minimise the risk of groundwater pollution.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>WW 3 The Greater Galway Area Strategic Drainage Study 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.</p> <p>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 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. "</p> <p>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.</p> <p>WW 6 Private Wastewater Treatment Plants 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).</p> <p>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 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.</p>

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		<p>complied with as appropriate.</p> <p>TKT 42 Flood Risk Management Guidelines It is a 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 Guidelines (2009) (and any updated/superseding legislation or policy guidance) and Department Circular PL2/2014 or updated/superseding version.</p> <p>TKT 43 Flood Risk Management and Assessment It is a policy objective of the Council to comply with the requirements of the DoEHLG/OPW <i>The Planning System and Flood Risk Management Guidelines for Planning Authorities</i> 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; (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 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 normally be permitted; (d) Galway County Council shall work with other bodies and organisations, as appropriate, to help protect critical infrastructure, including water and wastewater, within the County from risk of flooding.</p>	<p>WW 8 Storm Water Infrastructure 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.</p> <p>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.</p> <p>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.</p> <p>WW11 Protection of Irish Water Collection Systems 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.</p> <p>AF 1 Marine Aquaculture 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.</p> <p>SF 1 Shellfish Waters Directive 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.</p> <p>SF 2 Protection of Shellfish Waters To seek to protect the quality of designated shellfish waters off the County Galway coast.</p> <p>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 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.</p> <p>WR 2 River Basin Management Plans 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.</p> <p>WTWF 1 Wetland Sites 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).</p> <p>IW 1 Inland Waterways (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. (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. (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 and extent of any soil/groundwater contamination.</p> <p>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 Guidelines (2009) (and any updated/superseding legislation or policy guidance) and Department Circular PL2/2014 or any updated / superseding version.</p> <p>FL 2 Flood Risk Management and Assessment Comply with the requirements of the DoEHLG/OPW <i>The Planning System and Flood Risk Management Guidelines for Planning Authorities</i> and its accompanying Technical Appendices Document 2009 (including any updated/superseding documents).</p>

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		<p>TKT 44 Principles of Flood Risk Management Guidelines The Council shall implement the key principles of flood risk management set out in the Flood 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) Substitute less vulnerable uses, where avoidance is not possible; and, (c) Mitigate and manage the risk, where avoidance and substitution are not possible. 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.</p> <p>TKT 45 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 approach roads into Tuam.</p> <p>TKT 46 Surface Water Drainage and Sustainable Drainage Systems (SuDs) Maintain and enhance, as appropriate, the existing surface water drainage system in Tuam. Ensure that new developments are adequately serviced with surface water drainage infrastructure and promote the use of Sustainable Drainage Systems in all new developments. Surface water runoff from development sites will be limited to pre-development levels and planning applications for new developments will be required to provide details of surface water drainage and Sustainable Drainage Systems proposals. Refer also to Section 3.5 of the accompanying SFRA, "Sustainable Urban Drainage Systems and Surface Water Guidance and Strategy".</p> <p>TKT 47 Protection of Waterbodies and Watercourses Protect waterbodies and watercourses</p>	<p>This will include the following: (a) Avoid, reduce and/or mitigate, as appropriate in accordance with the Guidelines; (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 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 normally be permitted; (d) Galway County Council shall work with other bodies and organisations, as appropriate, to help protect critical infrastructure, including water and wastewater, within the County, from risk of flooding.</p> <p>FL 3 Principles of the Flood Risk Management Guidelines The Planning Authority shall implement the key principles of flood risk management set out in the Flood 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) Substitute less vulnerable uses, where avoidance is not possible; and (c) Mitigate and manage the risk, where avoidance and substitution are not possible. 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</p> <p>FL 4 Flood Relief Schemes The Planning Authority shall support and co-operate with the Office of Public Works (OPW) in the delivery of Flood Relief Schemes.</p> <p>FL 5 Catchment Planning The Planning Authority will support the OPW'S CFRAM Programme and catchment-based Flood Planning Groups, especially where catchments go 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.</p> <p>FL 6 Surface Water Drainage and Sustainable Drainage Systems (SuDs) Maintain and enhance, as appropriate, the existing surface water drainage system in the County. Ensure that new developments are adequately serviced with surface water drainage infrastructure and promote the use of Sustainable Drainage Systems in all new developments. Surface water runoff from development sites will be limited to pre-development levels and planning applications for new developments will be required to provide details of surface water drainage and sustainable drainage systems proposals.</p> <p>FL 7 Protection of Waterbodies and Watercourses Protect waterbodies and watercourses within the County from inappropriate development, including rivers, streams, associated undeveloped riparian strips, wetlands and natural floodplains. This will include protection buffers in riverine, wetland and coastal areas as appropriate.</p> <p>FL 8 Flood Risk Assessment for Planning Applications and CFRAMS 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 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 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 management of any residual risks. The Planning Authority shall have regard to the results of any CFRAM Studies in the assessment of planning 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 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 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.</p> <p>In addition to the County Plan SFRA datasets (including the Flood Zones, CFRAMS mapping, historical and predictive groundwater mapping, predictive pluviol mapping and historical flood risk indicator mapping, such as the Benefitting Lands mapping), new and emerging datasets (such as the OPW's National Fluvial Mapping that will supersede existing PFRA fluvial mapping for catchments greater than 5km2) must be consulted by prospective 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.</p> <p>FL 9 SFRA of Lower Tier Plans Lower tier plans shall undertake SFRA (Strategic Flood Risk Assessment) in compliance with the Flood Risk Management Guidelines.</p> <p>FL 10 SFRA/FRA and Climate Change SFRAs and site-specific FRAs shall provide information on the implications of climate change with regard to flood risk in relevant locations. The 2009</p>

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		<p>within the County from inappropriate development, including rivers, streams, associated undeveloped riparian strips, wetlands and natural floodplains. This will include protection buffers in the riverine, wetland and coastal areas as appropriate. To contribute towards protection and improvement of the status of surface and ground waters in accordance with the Water Framework Directive.</p> <p>Applications for development under the Plan must demonstrate that the proposal for development would not adversely affect a water body's ability to meet its objectives under the Water Framework Directive, individually as a result of the proposed development or cumulatively, in combination with other developments.</p> <p>TKT 48 Flood Risk Assessment for Planning Applications and CFRAMS</p> <p>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 guidance contained in Development Management Standards 2 and 3. 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 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 management of any residual risks. The Council shall have regard to the results of any CFRAM Studies in the assessment of planning applications. Where a development/land use 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.</p>	<p>OPW Draft Guidance on Assessment of Potential Future Scenarios for Flood Risk Management (or any superseding document) shall be consulted with to this effect.</p> <p>FL 11 FRA 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 the County.</p> <p>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.</p> <p>FL 13 CFRAM It is a policy objective of the Planning Authority to take account of and incorporate into local planning policy and decision making, including possible future variations to this plan, CFRAM measures that may be published in the future, including planned investment measures for managing and reducing flood risk.</p> <p>FL 14 Flood Vulnerable Zones 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, internal layout, flood resilient construction, flood resistant construction, emergency response planning, access and egress during flood events.</p> <p>FL 15 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.</p> <p>FL 16 Benefitting Land Applications for development on land identified as benefitting land may be prone to flooding, and as such site-specific flood risk assessments may be required in these areas.</p> <p>FL 17 Consultation with OPW Consult with the OPW in relation to proposed developments in the vicinity of drainage channels and rivers for which the OPW are responsible and retain a strip on either side of such channels where required, to facilitate maintenance access thereto. In addition, promote the sustainable management and uses of water bodies and avoid culverting or realignment of these features.</p> <p>FL 18 Inappropriate Development on Flood Zones 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 quality and avoid potential effects to ecological features.</p> <ul style="list-style-type: none"> • Any development proposals should be considered with caution and will be required to comply with The Planning System and Flood Risk Management Guidelines for Planning Authorities/Circular PL2/2014 & the associated Development Management Justification Test. • Climate Change should be duly considered in any development proposal. • 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). • Any development proposals submitted for this site will require a detailed ecological report (s), carried out by suitably qualified personnel for the purposes of informing Appropriate Assessment Screening by Galway County Council, the competent authority. • 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 staff and the public are aware of the special conditions/constraints attached. • A briefing will be provided to relevant staff within Galway County Council on the special conditions and constraints on relevant lands.

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Topic	Potentially Significant Adverse Effect, if Unmitigated	Draft Local Area Plan measures, including ⁵⁰ :	Existing Galway County Development Plan 2022-2028 measures, including:
		<p>TKT 49 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 Assessment of Potential Future Scenarios for Flood Risk Management (or any superseding document) shall be consulted with to this effect.</p> <p>TKT 50 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.</p> <p>TKT 51 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.</p> <p>TKT 52 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 OPE Climate Change Sectoral Adaptation Plan for Flood Risk Management applicable at the time.</p>	
Air and Climatic Factors	<ul style="list-style-type: none"> • 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 	<p>Strategic Aim 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.</p> <p>TKT 9 Town Centre Management Subject to appropriate resources, the Council in collaboration with stakeholders, shall prepare a town centre management plan for Tuam. The management plan will consider some or all of the following: a) The feasibility of a Town Centre market; b) Upgrade of public lighting and tidying of wirescapes in the Town Centre; c) Connectivity of the Town Centre including upgrading of paving, consideration of</p>	<p>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 and Cleaner Air for Europe (CAFÉ) Directive (2008/50/EC) and ensure that all air emissions associated with new developments are within Environmental Quality Standards as set out in the Air Quality Standards Regulations 2011 (SI No. 180 of 2011) (or any updated/superseding documents).</p> <p>AQ 2 Assessment of Air Quality 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.</p> <p>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.</p> <p>AQ 4 Air Purification Galway County Council shall encourage landscaping and deciduous tree planting in an environmentally sensitive manner within towns and villages as a means of air purification, the filtering of suspended particles and the improvement of their micro-climate.</p> <p>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 Regulations (including any updated/superseding Regulations that may be published within the lifetime of this Development Plan).</p> <p>NP 1 Galway County Council Noise Action Plan 2019-2023 To implement the Galway County Council Noise Action Plan 2019-2023 (and any subsequent Plan) in order to avoid, prevent and reduce the harmful</p>

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Topic	Potentially Significant Adverse Effect, if Unmitigated	Draft Local Area Plan measures, including ⁵⁰ :	Existing Galway County Development Plan 2022-2028 measures, including:
	<p>frequency of noise emissions and protection of sensitive receptors.</p> <ul style="list-style-type: none"> Potential conflicts with climate adaptation measures including those relating to flood risk management. 	<p>feasibility of identified pedestrianised lanes and routes through the Town;</p> <p>d) Scheme for façade improvement on identified priority streetscapes;</p> <p>e) Upgrade and improvement of street furniture;</p> <p>f) A co-ordinated vehicular access arrangement, which shall be in consultation and agreement with the Road Design Section of Galway County Council;</p> <p>g) Consistent sustained signage design policy within the Town Centre;</p> <p>h) Provision of appropriate quality landscaping and functional public spaces;</p> <p>i) Provide footpath and cycling links to the Town Centre; and,</p> <p>j) Car parking management.</p> <p>TKT 31 Support the implementation of the Local Transport Plan as set out in Section 3 in accordance with proper planning and sustainable development⁵¹.</p> <p>Additional Mitigation in relation to Policy Objective TKT 31:</p> <p>Ensure that new transport infrastructure, including cycling and walking infrastructure and multi-modal hubs, are subject to the following, as appropriate:</p> <ul style="list-style-type: none"> As outlined in the Galway County Development Plan Policy Objective PRP 2; and Environmental constraints, including those related to habitats and potential impacts, such as disturbance from lighting. This will include minimising river crossings, avoiding sensitive habitats, not increasing barriers to flood waters and sustainable design and construction techniques. <p>To reallocate corresponding road space to walking, cycling and public transport to accompany / occur concurrently with the provision of additional road space capacity.</p> <p>TKT 32 Transport Infrastructure</p> <p>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.</p>	<p>effects, including annoyance, due to environmental noise exposure.</p> <p>NP 2 Developments within Noise Maps (Noise Action Plan 2019-2023)</p> <p>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.</p> <p>NP3 Noise Impact Assessments</p> <p>To require an assessment of impact of the development on noise levels, having regard to the provisions of the Environmental Protection Agency Acts 1992 and 2003 and the EPA Noise Regulations 1994 when assessing planning application.</p> <p>NP 4 Noise Pollution and Regulation</p> <p>Restrict development proposals causing noise pollution in excess of best practice standards and regulate and control activities likely to give rise to excessive noise, other than those activities which are regulated by the EPA</p> <p>NP 5 Noise Mitigation Measures</p> <p>Require activities likely to give rise to excessive noise to install noise mitigation measures and monitors. The provision of a noise audit may be required where appropriate.</p> <p>CC 1 Climate Change</p> <p>Support and facilitate the implementation of European, National and Regional objectives for climate adaptation and mitigation taking into account other provisions of the Plan (including those relating to land use planning, energy, sustainable mobility, flood risk management and drainage) and having regard to the Climate mitigation and adaptation measures.</p> <p>CC 2 Transition to a low carbon, climate-resilient society</p> <p>It is a policy objective of the Planning Authority to support the transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050, by way of reducing greenhouse gases, increasing renewable energy, and improving energy efficiency.</p> <p>CC 3 County Galway Climate Adaptation Strategy 2019-2024</p> <p>To implement the County Galway Climate Adaptation Strategy 2019-2024 as appropriate.</p> <p>CC 4 Local Authority Climate Action Plan</p> <p>Support the preparation of a Climate Action Plan for County Galway.</p> <p>CC 5 Climate Adaptation and Mitigation</p> <p>To promote, support and direct effective climate action policies and objectives that seek to improve climate outcomes across County Galway through the encouragement and integration of appropriate mitigation and adaptation considerations and measures into all development and decision-making processes.</p> <p>CC 6 Local Authority Renewable Energy Strategy (LARES)</p> <p>To support the implementation of the Renewable Energy Strategy contained in Appendix 1 of the Galway County Development Plan to facilitate the transition to a low carbon county.</p> <p>CC 7 Climate Action Fund</p> <p>Support the delivery of sustainable development projects under the European Green Deal and utilise the Climate Action Fund/ Just Transition Fund established under the National Development Plan to encourage public and private climate mitigation and adaptation projects in line with criteria set out by the Fund at that time.</p> <p>CC 8 Climate Action and Development Location</p> <p>To implement, through the plan and future local areas plans, policies 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.</p> <p>CC 9 Mainstreaming Climate Change Adaptation</p> <p>Galway County Council shall incorporate climate change adaptation into land use planning, building layouts, energy, transport, natural resource management, forestry, agriculture and marine waters.</p> <p>CC 10 Green Infrastructure</p> <p>Galway County Council shall promote the benefit of open spaces and implement the integration of green infrastructure/networks (e.g., interconnected network of green spaces (including aquatic ecosystems) and other physical features on land) into new development and regeneration proposals in order to mitigate and adapt to climate change.</p>

⁵¹ 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.

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Topic	Potentially Significant Adverse Effect, if Unmitigated	Draft Local Area Plan measures, including ⁵⁰ :	Existing Galway County Development Plan 2022-2028 measures, including:
		<p>TKT 33 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, car clubs, public bike schemes, as appropriate.</p> <p>TKT 34 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.</p> <p>TKT 35 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.</p> <p>TKT 39 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.</p>	
Material Assets	<ul style="list-style-type: none"> Failure to provide adequate and appropriate waste water treatment services (water services) 	<p>Also refer to measures under other environmental components including Population and Human Health, Cultural Heritage, Soil, Water, Air, various Land Use and Phasing provisions.</p>	<p>Also refer to measures under other environmental components including Population and Human Health, Cultural Heritage, Soil, Water, Air, various Land Use and Phasing provisions.</p> <p>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).</p>

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Topic	Potentially Significant Adverse Effect, if Unmitigated	Draft Local Area Plan measures, including ⁶⁰ :	Existing Galway County Development Plan 2022-2028 measures, including:
	<p>infrastructure and capacity ensures the mitigation of potential conflicts).</p> <ul style="list-style-type: none"> 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. 	<p>Strategic Aims</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>TKT 17 Public Utilities</p> <p>Facilitate the provision and maintenance of essential public utility infrastructure, together with the necessary ancillary facilities and uses, as appropriate.</p> <p>Development proposals in the vicinity of public utilities infrastructure will be assessed on a case-by-case basis in accordance with proper planning and sustainable development.</p> <p>TKT 18 Water Supply, Wastewater and Combined Drainage Infrastructure</p> <p>Support Irish Water in the provision and maintenance adequate wastewater disposal and water supply and the maintenance of existing combined (sewage and surface water) drainage infrastructure, in accordance with EU Directives, to service Tuam. This will include satisfactory capacity for public wastewater and a satisfactory quantity and quality of water supply, Sustainable Drainage System approaches and techniques within the plan area shall also be supported.</p> <p>TKT 19 Water Supply and Water Conservation</p> <p>Ensure that new developments are adequately serviced with a suitable quantity and quality of drinking water supply, promote water conservation to reduce the overall level of water loss in the public supply and require that new domestic developments provide for water supply</p>	<p>AD4 Agriculture Waste</p> <p>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.</p> <p>WS 1 Enhancement of Water Supply Infrastructure</p> <p>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.</p> <p>WS 2 Protection of Water Supplies</p> <p>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.</p> <p>WS 3 River Basin Management Plan for Ireland 2018-2021</p> <p>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.</p> <p>WS 4 Requirement to Liaise with Irish Water – Water Supply</p> <p>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.</p> <p>WS 5 Private Water Supply</p> <p>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.</p> <p>WS 6 Water Framework Directive</p> <p>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.</p> <p>WS 7 Water Quality</p> <p>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.</p> <p>WS 8 Proliferation of Septic Tanks</p> <p>Encourage the use of high standard treatment plants to minimise the risk of groundwater pollution.</p> <p>CWS 1 Water Conservation with all Developments</p> <p>To ensure all developments incorporate water conservation measures such as rainwater harvesting to minimise wastage of water supply.</p> <p>CWS 2 Water Mains Rehabilitation</p> <p>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.</p> <p>CWS 3 Promotion of Water Conservation</p> <p>To support Irish Water in promoting public awareness and involvement in water conservation measures by households, business and industry.</p> <p>WW 1 Enhancement of Wastewater Supply Infrastructure</p> <p>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.</p> <p>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.</p> <p>WW 3 The Greater Galway Area Strategic Drainage Study</p> <p>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.</p> <p>WW 4 Requirement to Liaise with Irish Water – Wastewater</p> <p>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 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. "</p> <p>WW 5 Serviced Sites</p> <p>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.</p>

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Topic	Potentially Significant Adverse Effect, if Unmitigated	Draft Local Area Plan measures, including ⁵⁰ :	Existing Galway County Development Plan 2022-2028 measures, including:
		<p>metering.</p> <p>TKT 31 Support the implementation of the Local Transport Plan as set out in Section 3 in accordance with proper planning and sustainable development⁵².</p> <p>Additional Mitigation in relation to Policy Objective TKT 31: Ensure that new transport infrastructure, including cycling and walking infrastructure and multi-modal hubs, are subject to the following, as appropriate:</p> <ul style="list-style-type: none"> As outlined in the Galway County Development Plan Policy Objective PRP 2; and Environmental constraints, including those related to habitats and potential impacts, such as disturbance from lighting. This will include minimising river crossings, avoiding sensitive habitats, not increasing barriers to flood waters and sustainable design and construction techniques. <p>To reallocate corresponding road space to walking, cycling and public transport to accompany / occur concurrently with the provision of additional road space capacity.</p> <p>TKT 32 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.</p> <p>TKT 33 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, car clubs, public bike schemes, as appropriate.</p> <p>TKT 34 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</p>	<p>WW 6 Private Wastewater Treatment Plants 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).</p> <p>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 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.</p> <p>WW 8 Storm Water Infrastructure 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.</p> <p>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.</p> <p>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.</p> <p>WW11 Protection of Irish Water Collection Systems 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.</p> <p>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.</p> <p>WM 2 Requirements for Waste Management Support and promote the circular economy principles, prioritising prevention, reuse, recycling and 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.</p> <p>WM 3 Waste Recovery and Disposal Facilities Support and facilitate the provision of adequate waste recovery and disposal facilities for the County.</p> <p>WM 4 Waste Legalisation To require that all waste disposal shall be undertaken in compliance with the requirements of the Environmental Protection Agency and relevant Waste Management Legislation.</p>

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.

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		<p>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.</p> <p>TKT 35 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.</p> <p>TKT 36 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.</p> <p>TKT 45 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 approach roads into Tuam.</p>	
Cultural Heritage	<ul style="list-style-type: none"> Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities. 	<p>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.</p> <p>TKT 15 Tourism Development Encourage and assist in the development of</p>	<p>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).</p> <p>AH 2 Protected Structures (Refer 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 architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest, together with the integrity of their character and setting. (b) Review the Record of Protected Structures in order to provide a comprehensive schedule for the protection of structures of special importance in the County during the lifetime 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 detrimental 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.</p> <p>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</p>

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Topic	Potentially Significant Adverse Effect, if Unmitigated	Draft Local Area Plan measures, including ⁵⁰ :	Existing Galway County Development Plan 2022-2028 measures, including:
		<p>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.</p> <p>TKT 20 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), the National Monuments Act 1930 (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.</p> <p>TKT 23 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 Protection Guidelines 2004/2011 and the published Department of Arts 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 '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 architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest, together with the integrity of their character and setting.</p> <p>TKT 25 Architectural Conservation Area Protect, conserve and enhance the essential character of the Tuam Architectural Conservation Area, through respecting the surviving historic plots and street patterns and through the appropriate management and control of the design, location and layout of new development, alterations or</p>	<p>Protected Structures, in development management functions. AH 4 Architectural Conservation Areas (Refer to Appendix 7) Protect, conserve and enhance the special character of the Architectural Conservation Areas (ACA) included in this plan through the appropriate management and control of the design, location and layout of new development, modifications, alterations or extensions to existing structures, surviving historic plots and street patterns and/or modifications to the character or setting of the Architectural Conservation Area. Works within the ACA shall ensure the conservation of traditional features and building elements that contribute to the character of the area. The special character of an area includes its traditional building stock and material finishes, spaces, streetscape, shop fronts, landscape and setting. New proposals shall have appropriate regard to scale, plot, form, mass, design, materials, colours and function. This will be achieved by: (a) Protecting all buildings, structures, groups of structures, sites, landscapes and all features which contribute to the special character of the ACA from demolition and non-sympathetic alterations. (b) Promote appropriate and sensitive reuse and rehabilitation of buildings and sites within the ACA. (c) Ensure new development within or adjacent to an ACA respects the established character of the area and contributes positively in terms of design, scale, setting and material finishes to the ACA. (d) Promote high quality architectural design within ACAs. (e) Seek the repair and reuse of traditional shopfronts and where appropriate, encourage new shopfronts of a high quality architectural design. (f) Ensure that all new signage, lighting, advertising and utilities to buildings within ACA are designed, constructed, and located in such a manner that they do not detract from the character of the ACA. (g) Protect and enhance the quality of open spaces within ACAs and ensure the protection and where necessary reuse of street furniture and use of appropriate materials during the course of public infrastructure schemes within ACAs. (h) Prohibit development proposals, either in whole or in part for the demolition of a structure within an Architectural Conservation Area that contributes to the special character of the area. (i) Protect structures in ACAs from non-sympathetic alterations and encourage appropriate in-fill developments. (j) Works materially affecting the character of a protected structure or the exterior of a building/ structure within an ACA will require planning permission; (k) Any works carried out to a protected structure or the exterior of a building/structure within an ACA shall be in accordance with best conservation practice and use sustainable and appropriate materials. (l) Ensure that any development, modifications, alterations, or extensions materially affecting the character of a protected structure, or a structure adjoining a protected structure, or a structure within or adjacent to an Architectural Conservation Area (ACA), is sited and designed appropriately and is not detrimental to the character or setting of the protected structure or of the ACA.</p> <p>AH 5 Maintenance and Re-use of existing Building Stock Promote the maintenance and appropriate re-use of the existing stock of buildings with architectural merit as a more sustainable option to their demolition and redevelopment.</p> <p>AH 6 Vernacular Architecture Recognise the importance of the contribution of vernacular architecture to the character of a place and ensure the protection, retention and appropriate revitalisation and reuse of the vernacular built heritage including structures that contribute to landscape and townscape character and resist the demolition of these structures.</p> <p>AH 7 Local Place Names Protect local place names as an important part of the cultural heritage and unique character of an area. Support the use of appropriate names for new developments that reflect the character and heritage of the area and that contribute to the local distinctiveness of a place.</p> <p>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.</p> <p>AH 9 Local Landscape and Place Assessment 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.</p> <p>AH 10 Designed Landscapes 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 be accompanied by an appraisal of the contributing elements and an impact assessment.</p> <p>AH 11 Custodianship Promote an inter-disciplinary approach demonstrating best practice with regard to the custodianship of protected structures, recorded monuments and elements of built heritage.</p> <p>AH 12 Placemaking for Towns and villages Promote the value of placemaking in cooperation with communities in their towns, villages and local areas.</p> <p>AH 13 Traditional Building Skills Support and promote traditional building skills, training and awareness of the use of appropriate materials and skills within the Local Authority, community groups, owners and occupiers of traditionally built structures.</p> <p>AH 14 Design and Landscaping in New Buildings Encourage new buildings that foster an innovative approach to design and acknowledges the diversity of suitable design solutions in appropriate locations while promoting the added economic, amenity and environmental value of good design.</p>

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Topic	Potentially Significant Adverse Effect, if Unmitigated	Draft Local Area Plan measures, including ⁶⁰ :	Existing Galway County Development Plan 2022-2028 measures, including:
		<p>extensions to existing structures, and/or modifications to the setting of the structure and the character of the Architectural Conservation Area. The identification of areas of special interest within the Plan boundary may be considered during the lifetime of the Plan.</p>	<p>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.</p> <p>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.</p> <p>ARC 3 Archaeological Landscapes To facilitate where possible the identification of important archaeological landscapes in the County</p> <p>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.</p> <p>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.</p> <p>ARC 7 Battlefield Sites Protect the Battle of Aughrim site and other battlefield sites and their settings.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>CUH 2 Special Places of Historic Interest To protect and promote where possible special places of historical interest.</p> <p>CUH 3 Placenames/Naming of New Developments 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.</p> <p>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.</p> <p>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.</p>

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Topic	Potentially Significant Adverse Effect, if Unmitigated	Draft Local Area Plan measures, including ⁶⁰ :	Existing Galway County Development Plan 2022-2028 measures, including:
Landscape	<ul style="list-style-type: none"> Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape. 	<p>Also refer to measures under Biodiversity and Flora and Fauna and Cultural Heritage</p> <p>TKT 21 High Quality, Contextually Sensitive Design</p> <p>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.</p>	<p>Also refer to measures under Biodiversity and Flora and Fauna and Cultural Heritage.</p> <p>Policy Objectives Landscape Conservation and Management</p> <p>LCM 1 Preservation of Landscape Character</p> <p>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.</p> <p>LCM 2 Landscape Sensitivity Classification</p> <p>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.</p> <p>LCM 3 Landscape Sensitivity Ratings</p> <p>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.</p> <p>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.</p> <p>PVSR 1 – Protected Views and Scenic Routes</p> <p>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.</p> <p>TWHS 1 Tentative World Heritage Sites.</p> <p>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. Collaborate with landowners, local communities and other relevant stakeholders to achieve World Heritage Site status for the sites identified in County Galway.</p>

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, to which the Proposed Material Alterations relate.

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

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

10.2 Indicators and Targets

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

Internal monitoring of the environmental effects of grants of permission in the Council would provide monitoring of certain indicators on a *grant of permission*⁵³ 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.

⁵³ The likely significant effects of development proposals on environmental sensitivities are further determined during the development management process. Documenting any identified effects as a result of a development to be permitted can help to fulfill monitoring requirements.

10.4 Reporting

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

Monitoring frequencies of indicators tend to change although where they are consistent frequencies are identified.

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.

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

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

Table 10.1 Indicators, Targets, Sources and Remedial Action⁵⁴

Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action
Biodiversity, Flora and Fauna	BFF	<ul style="list-style-type: none"> Condition of European sites⁵⁵ 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 3 years) Consultations with the NPWS (see Section 10.4) 	<ul style="list-style-type: none"> 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.
		<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Internal review of local land use plans 	<ul style="list-style-type: none"> Review internal systems
		<ul style="list-style-type: none"> SEAs and AAs as relevant for new Council policies, plans, programmes etc. 	<ul style="list-style-type: none"> Screen for and undertake SEA and AA as relevant for new Council policies, plans, programmes etc. 	<ul style="list-style-type: none"> Internal monitoring of preparation of local land use plans 	<ul style="list-style-type: none"> Review internal systems
		<ul style="list-style-type: none"> Status of water quality in the County's water bodies 	<ul style="list-style-type: none"> Included under Water below 	<ul style="list-style-type: none"> Included under Water below 	<ul style="list-style-type: none"> Included under Water below
		<ul style="list-style-type: none"> 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” 	<ul style="list-style-type: none"> 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” 	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission 	<ul style="list-style-type: none"> Review internal systems
Population and Human Health	PHH	<ul style="list-style-type: none"> Implementation of Plan measures relating to the promotion of economic growth as provided for by County Development Plan Chapter 5 “Economic, Enterprise and Retail” 	<ul style="list-style-type: none"> 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” 	<ul style="list-style-type: none"> Internal review of progress on implementing Plan objectives Consultations with DECC (see Section 10.4) 	<ul style="list-style-type: none"> Review internal systems Consultations with DECC

⁵⁴ 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.

⁵⁵ 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.

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Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action
			<ul style="list-style-type: none"> 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) 		
		<ul style="list-style-type: none"> Number of spatial concentrations of health problems arising from environmental factors resulting from development permitted under the Plan 	<ul style="list-style-type: none"> No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan 	<ul style="list-style-type: none"> Consultations with the Health Service Executive and EPA 	<ul style="list-style-type: none"> Consultations with the Health Service Executive and EPA
		<ul style="list-style-type: none"> Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures 	<ul style="list-style-type: none"> Increase in the proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures 	<ul style="list-style-type: none"> CSO data Monitoring of Galway County Council's Climate Change Adaptation Strategy 2019-2024 	<ul style="list-style-type: none"> Where proportion of population shows increase in private car use above CSO 2016 figures, the Council will coordinate with the Regional Assembly, the DHLGH, DECC and NTA to develop a tailored response.
		<ul style="list-style-type: none"> Number of spatial plans that include specific green infrastructure mapping 	<ul style="list-style-type: none"> Require all local level land use plans to include specific green infrastructure mapping 	<ul style="list-style-type: none"> Internal review of local land use plans 	<ul style="list-style-type: none"> Review internal systems
Soil (and Land)	S	<ul style="list-style-type: none"> Proportion of population growth occurring on infill and brownfield lands compared to greenfield (also relevant to Material Assets) 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> EPA Geoportal Compilation of greenfield and brownfield development for the DHLGH AA/Screening for AA for each application 	<ul style="list-style-type: none"> 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.
		<ul style="list-style-type: none"> Instances where contaminated material generated from brownfield and infill must be disposed of 	<ul style="list-style-type: none"> Dispose of contaminated material in compliance with EPA guidance and waste management requirements 	<ul style="list-style-type: none"> Internal review of grants of permission where contaminated material must be disposed of 	<ul style="list-style-type: none"> Consultations with the EPA and Development Management
		<ul style="list-style-type: none"> Environmental assessments and AAs as relevant for applications for brownfield and infill development prior to planning permission 	<ul style="list-style-type: none"> Screen for and undertake environmental assessments and AA as relevant for applications for brownfield and infill development prior to planning permission 	<ul style="list-style-type: none"> Internal monitoring of grants of permission 	<ul style="list-style-type: none"> Review internal systems
Water	W	<ul style="list-style-type: none"> Status of water bodies as reported by the EPA Water Monitoring Programme for the WFD 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> EPA Monitoring Programme for WFD compliance 	<ul style="list-style-type: none"> 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.

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Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action
		<ul style="list-style-type: none"> Number of incompatible developments permitted within flood risk areas 	<ul style="list-style-type: none"> Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk 	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission 	<ul style="list-style-type: none"> Where planning applications are being permitted on flood zones, the Council will ensure that such grants are in compliance with the Flood Risk Management Guidelines and include appropriate flood risk mitigation and management measures.
Material Assets	MA	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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.
		<ul style="list-style-type: none"> Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures 	<ul style="list-style-type: none"> Increase in the proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures 	<ul style="list-style-type: none"> CSO data Monitoring of Galway County Council's Climate Change Adaptation Strategy 2019-2024 	<ul style="list-style-type: none"> Where proportion of population shows increase in private car use above CSO 2016 figures, the Council will coordinate with the Regional Assembly, the DHLGH, DECC and NTA to develop a tailored response.
Air	A	<ul style="list-style-type: none"> Proportion of journeys made by private fossil fuel-based car compared to 2016 National Travel Survey levels of 74% NO_x, SO_x, PM10 and PM2.5 as part of Ambient Air Quality Monitoring 	<ul style="list-style-type: none"> Decrease in proportion of journeys made by private fossil fuel-based car compared to 2016 National Travel Survey levels Improvement in Air Quality trends, particularly in relation to transport related emissions of NO_x and particulate matter 	<ul style="list-style-type: none"> 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) 	<ul style="list-style-type: none"> Where proportion of population shows increase in private car use above CSO 2016 figures, Council will coordinate with the Regional Assembly, DHLGH, DECC and NTA to develop a tailored response. See also entry under Population and human health above
Climatic Factors	C	<ul style="list-style-type: none"> Implementation of Plan measures relating to climate reduction targets 	<ul style="list-style-type: none"> For review of progress on implementing Plan objectives to demonstrate successful implementation of measures relating to climate reduction targets 	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission 	<ul style="list-style-type: none"> Review internal systems
		<ul style="list-style-type: none"> A competitive, low-carbon, climate-resilient and environmentally sustainable economy 	<ul style="list-style-type: none"> Contribute towards transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050 	<ul style="list-style-type: none"> Monitoring of Galway County Council's Climate Change Adaptation Strategy 2019-2024 EPA Annual National Greenhouse Gas Emissions Inventory reporting 	<ul style="list-style-type: none"> 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.
		<ul style="list-style-type: none"> Share of renewable energy in transport 	<ul style="list-style-type: none"> Contribute towards the target of the Renewable Energy Directive (2009/28/EC), 		

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Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action	
			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	<ul style="list-style-type: none"> Climate Action Regional Office Consultations with DECC (at monitoring evaluation - see Section 10.4) 		
		<ul style="list-style-type: none"> Carbon dioxide (CO₂) emissions across the electricity generation, built environment and transport sectors 	<ul style="list-style-type: none"> 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 			
		<ul style="list-style-type: none"> Energy consumption, the uptake of renewable options and solid fuels for residential heating 	<ul style="list-style-type: none"> To promote reduced energy consumption and support the uptake of renewable options and a move away from solid fuels for residential heating 			
		<ul style="list-style-type: none"> Proportion of journeys made by private fossil fuel-based car compared to 2016 levels 	<ul style="list-style-type: none"> Decrease in the proportion of journeys made by residents of the County using private fossil fuel-based car compared to 2016 levels 	<ul style="list-style-type: none"> CSO data Monitoring of Galway County Council's Climate Change Adaptation Strategy 2019-2024 		<ul style="list-style-type: none"> 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.
		<ul style="list-style-type: none"> Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures 	<ul style="list-style-type: none"> Increase in the proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures 	<ul style="list-style-type: none"> CSO data Monitoring of Galway County Council's Climate Change Adaptation Strategy 2019-2024 		<ul style="list-style-type: none"> Where proportion of population shows increase in private car use above CSO 2016 figures, the Council will coordinate with the Regional Assembly, the DHLGH, DECC and NTA to develop a tailored response.
Cultural Heritage	CH	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission 	<ul style="list-style-type: none"> 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.. 	
		<ul style="list-style-type: none"> Percentage of entries to the Record of Protected Structures and Architectural Conservation Areas and their context protected from significant adverse effects arising from new development granted permission under the Plan 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Consultation with DHLGH (see Section 10.4). 		
Landscape	L	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission 	<ul style="list-style-type: none"> 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)	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Carry out an 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EIA Directive (2011/92/EU as amended by 2014/52/EU)	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. The environmental impact assessment shall identify, describe and assess in an appropriate manner, in the light of each individual case and in accordance with Articles 4 to 12, the direct and indirect effects of a project on the following factors: human beings, fauna and flora, soil, water, air, climate and the landscape, material assets and the cultural heritage, the interaction between each factor. Consult with relevant authorities, stakeholders and public allowing sufficient time to make a submission before a decision is made. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Habitats Directive (92/43/EEC)	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Propose and protect sites of importance to habitats, plant and animal species. Establish a network of European sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex II, to enable the natural habitat types and the species' habitats concerned to be maintained or, where appropriate, restored to a favourable conservation status in their natural range. Carry out comprehensive assessment of habitat types and species present. Establish a system of strict protection for the animal species and plant species listed in Annex IV. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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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
Birds Directive (2009/147/EC)	<ul style="list-style-type: none"> Conserve all species of naturally occurring birds in the wild state including their eggs, nests and habitats. Protect, manage and control these species and comply with regulations relating to their exploitation. The species included in Annex I shall be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution. 	<ul style="list-style-type: none"> 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Nitrates Directive (91/676/EC)	<ul style="list-style-type: none"> Reducing water pollution caused or induced by nitrates from agricultural sources and - preventing further such pollution. 	<p>Ireland's Nitrates Action Programme is designed to prevent pollution of surface waters and ground water from agricultural sources and to protect and improve water quality. Ireland's third NAP came into operation in 2014. Each Member State's NAP must include:</p> <ul style="list-style-type: none"> 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Integrated Pollution Prevention Control Directive (2008/1/EC)	<ul style="list-style-type: none"> 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. 	<p>The IPPC Directive is based on several principles:</p> <ul style="list-style-type: none"> an integrated approach best available techniques, flexibility; and public participation 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Plant Protection (products) Directive 2009/127/EC	<ul style="list-style-type: none"> 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). 	<ul style="list-style-type: none"> 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Renewables Directive (2009/28/EC)	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to

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Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	<ul style="list-style-type: none"> All EU countries must also ensure that at least 10% of their transport fuels come from renewable sources by 2020. 	<ul style="list-style-type: none"> 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. 	<p>comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
Indirect Land Use Change Directive (2012/0288(COD))	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
Alternative Fuels Infrastructure Directive (2014/94/EU)	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
EU Energy Efficiency Directive (2012/27/EU)	<ul style="list-style-type: none"> Establishes a set of binding measures to help the EU reach its 20% energy efficiency target by 2020. Under the Directive, all EU countries are required to use energy more efficiently at all stages of the energy chain, from production to final consumption. 	<ul style="list-style-type: none"> 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
EU Seveso Directive (2012/18/EU)	<ul style="list-style-type: none"> 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 	<p>The Seveso Directive is well integrated with other EU policies, thus avoiding double regulation or other administrative burden. This includes the following related policy areas:</p> <ul style="list-style-type: none"> Classification, labelling and packaging of chemicals; The Union's Civil Protection Mechanism; 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may</p>

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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
	manner.	<ul style="list-style-type: none"> 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)	<ul style="list-style-type: none"> 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. 	<p>The Strategy contains specific commitments and actions to be delivered by 2030, including:</p> <ul style="list-style-type: none"> 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Green Infrastructure Strategy	Aims to create a robust enabling framework in order to promote and facilitate Green Infrastructure (GI) projects.	<ul style="list-style-type: none"> 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
UN Kyoto Protocol (2nd Kyoto Period), the Second European Climate Change Programme (ECCP II), Paris climate conference (COP21) 2015 (Paris Agreement)	<p>The UN Kyoto Protocol set of policy measures to reduce greenhouse gas emissions.</p> <p>The Second European Climate Change Programme (ECCP II) aims to identify and develop all the necessary elements of an EU strategy to implement the Kyoto Protocol.</p> <p>At the Paris climate conference (COP21) in December 2015, 195 countries adopted the first-ever universal, legally binding global climate deal. The agreement sets out a global action plan to put the world on track to avoid dangerous climate change by limiting global warming to well below 2°C.</p>	<ul style="list-style-type: none"> 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU 2020 Climate and Energy Package	<ul style="list-style-type: none"> 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. 	<p>Four pieces of complimentary legislation:</p> <ul style="list-style-type: none"> 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and

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		storage.	align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU 2030 Framework for Climate and Energy	<ul style="list-style-type: none"> 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. 	<p>To meet the targets, the European Commission has proposed the following policies for 2030:</p> <ul style="list-style-type: none"> 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
<p>The Clean Air for Europe Directive (2008/50/EC) (EU Air Framework Directive)</p> <p>Fourth Daughter Directive (2004/107/EC)</p>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Noise Directive (2002/49/EC)	The Noise Directive - Directive 2002/49/EC relating to the assessment and management of environmental noise - is part of an EU strategy setting out to reduce the number of people affected by noise in the longer term and to provide a framework for developing existing Community policy on noise reduction from source.	<p>The Directive requires competent authorities in Member States to:</p> <ul style="list-style-type: none"> 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; 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. <p>The Directive does not set any limit value, nor does it prescribe the measures to be used in the action plans, which remain at the discretion of the competent authorities.</p>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Floods Directive (2007/60/EC)	<ul style="list-style-type: none"> Establishes a framework for the assessment and management of flood risks Reduce adverse consequences for human health, the environment, cultural heritage and economic activity associated with floods in the Community 	<ul style="list-style-type: none"> 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 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

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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
		<p>Articles listed above.</p> <ul style="list-style-type: none"> Inform the public and allow the public to participate in planning process. 	<p>towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Water Framework Directive (2000/60/EC)</p>	<ul style="list-style-type: none"> Establish a framework for the protection of water bodies to include inland surface waters, transitional waters, coastal waters and groundwater and their dependent wildlife and habitats. Preserve and prevent the deterioration of water status and where necessary improve and maintain “good status” of water bodies. Promote sustainable water usage. The Water Framework Directive repealed the following Directives: <ul style="list-style-type: none"> The Drinking Water Abstraction Directive Sampling Drinking Water Directive Exchange of Information on Quality of Surface Freshwater Directive Shellfish Directive Freshwater Fish Directive Groundwater (Dangerous Substances) Directive Dangerous Substances Directive 	<ul style="list-style-type: none"> 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Groundwater Directive (2006/118/EC)</p>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Drinking Water Directive (98/83/EC)</p>	<ul style="list-style-type: none"> Improve and maintain the quality of water intended for human consumption. Protect human health from the adverse effects of any contamination of water intended for human consumption by ensuring that it is wholesome and clean. 	<ul style="list-style-type: none"> 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

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Urban Waste Water Treatment Directive (91/271/EEC)	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
Environmental Liability Directive (2004/35/EC) as amended by Directive 2006/21/EC, Directive 2009/31/EC and Directive 2013/30/EU	<ul style="list-style-type: none"> Establish a framework of environmental liability based on the 'polluter-pays' principle, to prevent and remedy environmental damage. 	<ul style="list-style-type: none"> Relates to environmental damage caused by any of the occupational activities listed in Annex III, and to any imminent threat of such damage occurring by reason of any of those activities; damage to protected species and natural habitats caused by any occupational activities other than those listed in Annex III, and to any imminent threat of such damage occurring by reason of any of those activities, whenever the operator has been at fault or negligent. 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
European Convention on the Protection of the Archaeological Heritage (Valletta 1992)	<ul style="list-style-type: none"> The aim of this (revised) Convention is to protect the archaeological heritage as a source of the European collective memory and as an instrument for historical and scientific study. 	<p>The Valletta Convention makes the conservation and enhancement of the archaeological heritage one of the goals of urban and regional planning policies. The Convention sets guidelines for the funding of excavation and research work and publication of research findings. It also deals with public access, in particular to archaeological sites, and educational actions to be undertaken to develop public awareness of the value of the archaeological heritage. It also constitutes an institutional framework for pan-European co-operation on the archaeological heritage, entailing a systematic exchange of experience and experts among the various States.</p>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

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Convention of the Protection of the Architectural Heritage of Europe (Granada 1995)	<ul style="list-style-type: none"> The main purpose of the Convention is to reinforce and promote policies for the conservation and enhancement of Europe's heritage. It also affirms the need for European solidarity with regard to heritage conservation and is designed to foster practical co-operation among the Parties. It establishes the principles of "European co-ordination of conservation policies" including consultations regarding the thrust of the policies to be implemented. 	<ul style="list-style-type: none"> 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Council of Europe Framework Convention on the Value of Cultural Heritage for Society (Faro 2005)	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Landscape Convention 2000	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
The Seventh Environmental Action Programme (EAP) of the European Community (2013-2020)	<p>It identifies three key objectives:</p> <ul style="list-style-type: none"> 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 	<p>Four so called "enablers" will help Europe deliver on these objectives (goals):</p> <ul style="list-style-type: none"> 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. <p>Two additional horizontal priority objectives complete the programme:</p> <ul style="list-style-type: none"> 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Bern Convention (Convention on the Conservation of European Wildlife and Natural Habitats)	<p>The convention has three main aims:</p> <ul style="list-style-type: none"> 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 	<p>The Parties under the convention recognise the intrinsic value of nature, which needs to be preserved and passed to future generations, they also:</p> <ul style="list-style-type: none"> 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to

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		<p>the Caucus.</p> <ul style="list-style-type: none"> • 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. 	<p>comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
Bali Road Map (2007)	<p>The overall goals of the project are twofold:</p> <ul style="list-style-type: none"> • 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. 	<p>The Bali Action Plan is centred on four main building Blocks:</p> <ul style="list-style-type: none"> • mitigation • adaptation • technology • financing 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
Cancun Agreements (2010)	<p>Set of decisions taken at the COP 16 Conference in Cancun in 2010 which addresses a series of key issues in the fight against climate change. Cancun Agreements' main objectives cover:</p> <ul style="list-style-type: none"> • Mitigation • Transparency of actions • Technology • Finance • Adaptation • Forests • Capacity building 	<p>Among the most prominent agreements is the establishment of a Green Climate Fund to transfer money from the developed to developing world to tackle the impacts of climate change.</p>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
Doha Climate Gateway (2012)	<p>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.</p>	<ul style="list-style-type: none"> • 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
EU Common Agricultural Policy	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users</p>

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EU REACH Regulation (EC 1907/2006)	<ul style="list-style-type: none"> Aims to improve the protection of human health and the environment through the better and earlier identification of the intrinsic properties of chemical substances. 	<p>The aims are achieved by applying REACH, namely:</p> <ul style="list-style-type: none"> Registration, Evaluation, Authorisation; and Restriction of chemicals. <p>REACH also aims to enhance innovation and competitiveness of the EU chemicals industry.</p>	<p>and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p> <p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
Stockholm Convention	<ul style="list-style-type: none"> The objective of the Stockholm Convention is to protect human health and the environment from persistent organic pollutants. 	<ul style="list-style-type: none"> 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 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
Ramsar Convention	<p>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".</p>	<p>Under the "three pillars" of the Convention, the Contracting Parties commit to:</p> <ul style="list-style-type: none"> 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
European 2020 Strategy for Growth	<p>Europe 2020 sets out a vision of Europe's social market economy for the 21st century and puts forward three mutually reinforcing priorities:</p> <ul style="list-style-type: none"> 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. 	<p>In order to reach these priorities, the Commission proposes five quantitative targets to fulfil by 2020:</p> <ol style="list-style-type: none"> 75 % of the population aged 20-64 should be employed; 3% of the EU's GDP should be invested in R&D; the "20/20/20" climate/energy targets should be met (including an increase to 30% of emissions reduction if the conditions are right); the share of early school leavers should be under 10% and at least 40% of the younger generation should have a tertiary degree; 20 million less people should be at risk of poverty. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

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National Level			
Ireland 2040 - Our Plan, the National Planning Framework, and the National Development Plan	<ul style="list-style-type: none"> The National Planning Framework is the Government's high-level strategic plan for shaping the future growth and development of to the year 2040. It is a framework to guide public and private investment, to create and promote opportunities for people, and to protect and enhance the environment - from villages to cities, and everything around and in between. The National Development Plan sets out the investment priorities that will underpin the successful implementation of the new National Planning Framework. This will guide national, regional and local planning and investment decisions in Ireland over the next two decades, to cater for an expected population increase of over 1 million people. 	<p>National Strategic Outcomes as follows:</p> <ol style="list-style-type: none"> Compact Growth Enhanced Regional Accessibility Strengthened Rural Economies and Communities Sustainable Mobility A Strong Economy, supported by Enterprise, Innovation and Skills High-Quality International Connectivity Enhanced Amenity and Heritage Transition to a Low-Carbon and Climate-Resilient Society Sustainable Management of Water and other Environmental Resources 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Planning, Land Use and Transport Outlook 2040 [in preparation]	<p>The PLUTO will take account of forecasted future economic and demographic scenarios, affordability considerations and relevant Government policies and will:</p> <ol style="list-style-type: none"> Quantify in broad terms the appropriate scale of financial investment in land transport over the long term; Consider how fiscal, environmental and technological developments might impact on this investment; and, Identify strategic priorities for future investment to ensure land transport infrastructure provision facilitates the objectives of Project Ireland 2040. 	In preparation	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Planning and Development Act 2000 (as amended)	<ul style="list-style-type: none"> The core principal objectives of this Act are to amend the Planning Acts of 2000 – 2009 with specific regard given to supporting economic renewal and sustainable development. 	<ul style="list-style-type: none"> 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities (Environmental Assessment of Certain Plans and Programmes Regulations 2004 (S.I. 435 of 2004), as amended by S.I. 200 of 2011	<ul style="list-style-type: none"> The purpose of these Regulations is to transpose into Irish law Directive 2001/42/EC of 27 June 2001 (O.J. No. L 197, 21 July 2001) on the assessment of the effects of certain plans and programmes on the environment – commonly known as the Strategic Environmental Assessment (SEA) Directive. 	<ul style="list-style-type: none"> 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2011, as amended)	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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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	<p>implementation of Directive 2009/147/EC of the European Parliament and of the Council on the protection of wild birds.</p>	<ul style="list-style-type: none"> 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. 	<p>combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Waste Management Act 1996, as amended</p>	<ul style="list-style-type: none"> To make provision in relation to the prevention, management and control of waste; to give effect to provisions of certain acts adopted by institutions of the European communities in respect of those matters; to amend the Environmental Protection Agency Act, 1992, and to repeal certain enactments and to provide for related matters. 	<ul style="list-style-type: none"> 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>European Communities Environmental Objectives (FPM) Regulations 2009 (S.I. 296 of 2009)</p>	<ul style="list-style-type: none"> The purpose of these Regulations is to support the achievement of favourable conservation status for freshwater pearl mussels 	<ul style="list-style-type: none"> 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>European Communities Environmental Objectives (Groundwater) Regulations 2010 (S.I. 9 of 2010), as amended (S.I. No. 366 of 2016)</p>	<ul style="list-style-type: none"> To amend the European Communities Environmental Objectives (Groundwater) Regulations 2010 (S.I. No. 9 of 2010) to make further provision to implement Commission Directive 2014/80/EU of 20 June 2014 amending Annex II to Directive 2006/118/EC of the European Parliament and of the Council on the protection of groundwater against pollution and deterioration. 	<p>The substances and threshold values set out in Schedule 5 to S.I. No. 9 of 2010 have been reviewed and amended where necessary, based on existing monitoring information and international guidelines on appropriate threshold values.</p> <ul style="list-style-type: none"> 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2014 (S.I. No. 31 of 2014)</p>	<ul style="list-style-type: none"> These Regulations, which give effect to Ireland's 3rd Nitrates Action Programme, provide statutory support for good agricultural practice to protect waters against pollution from agricultural sources 	<p>The Regulations include measures such as:</p> <ul style="list-style-type: none"> 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute</p>

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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	<ul style="list-style-type: none"> 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. 	<p>When considering a plan or framework, for approval, the Government shall endeavour to achieve the national transition objective within the period to which the objective relates and shall, in endeavouring to achieve that objective, ensure that such objective is achieved by the implementation of measures that are cost effective and shall, for that purpose, have regard to:</p> <ul style="list-style-type: none"> 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
The Sustainable Development Goals National Implementation Plan (2018 – 2020)	<ul style="list-style-type: none"> National Implementation Plan 2018 - 2020 is in direct response to the 2030 Agenda for Sustainable Development and provides a whole-of-government approach to implement the 17 Sustainable Development Goals (SDGs). The Plan provides a 'SDG Matrix' which identifies the responsible Government Departments for each of the 169 targets. It also includes a 'SDG Policy Map' indicating the relevant national policies for each of the targets. 	<p>The Plan identifies four strategic priorities to guide implementation:</p> <ul style="list-style-type: none"> 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Infrastructure and Capital Investment Plan (2016-2021)	<ul style="list-style-type: none"> €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. 	<ul style="list-style-type: none"> 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 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

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European Union (Birds and Natural Habitats) (Sea-Fisheries) Regulations 2013 (S.I. 290 of 2013)	These regulations have been drafted to implement the responsibilities of the Minister for Agriculture Food and the Marine in relation to sea fisheries in Natura 2000 sites, in accordance with the Habitats and Birds Directives as transposed by the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2011).	<ul style="list-style-type: none"> • 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. 	regulatory framework for environmental protection and management. Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Ireland's National Renewable Energy Action Plan 2010 (Irish Government submission to the European Commission)	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Strategy for Renewable Energy (2012-2020)	<ul style="list-style-type: none"> • The Government's overarching strategic objective is to make renewable energy an increasingly significant component of Ireland's energy supply by 2020, so that at a minimum it will achieve its legally binding 2020 target in the most cost-efficient manner for consumers. • 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: <ul style="list-style-type: none"> • 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Climate Mitigation Plan 2017	<ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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 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

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National Clean Air Strategy [in preparation]	<ul style="list-style-type: none"> The Clean Air Strategy will provide the strategic policy framework necessary to identify and promote integrated measures across government policy that are required to reduce air pollution and promote cleaner air while delivering on wider national objectives. 	<ul style="list-style-type: none"> 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. 	<p>achievement of the objectives of the regulatory framework for environmental protection and management.</p> <p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
EirGrid's Grid25 Strategy and associated Grid25 Implementation Programme 2017-2022	<ul style="list-style-type: none"> EirGrid's mission is to develop, maintain and operate a safe, secure, reliable, economical and efficient transmission system for Ireland; <i>"Our vision is of a grid developed to match future needs, so it can safely and reliably carry power all over the country to the major towns and cities and onwards to every home, farm and business where the electricity is consumed and so it can meet the needs of consumers and generators in a sustainable way."</i> 	<ul style="list-style-type: none"> 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
Strategy for the Future Development of National and Regional Greenways (2018)	<ul style="list-style-type: none"> The objective of this Strategy is to assist in the strategic development of nationally and regionally significant Greenways in appropriate locations constructed to an appropriate standard in order to deliver a quality experience for all Greenways users. 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. 	<ul style="list-style-type: none"> 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
National Water Resources Plan [in preparation]	<ul style="list-style-type: none"> 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. 	<p>The key objectives of the plan are to:</p> <ul style="list-style-type: none"> 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 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
National Strategic Plan	Vision: <i>"Aquaculture in RC is economically, socially and ecologically</i>	General development and growth objectives of marine and freshwater	Where new land use developments or

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for Aquaculture Development (2014-2020)	<i>sustainable, with a developed infrastructure, strong human potentials and an organized market. The consumption of aquaculture products is equal or above EU average, while the technological development of the sector is among the best in the EU."</i>	aquaculture (2014 – 2020): <ul style="list-style-type: none"> 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 	activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Construction 2020, A Strategy for a Renewed Construction Sector	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Sustainable Development: A Strategy for Ireland (1997)	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The Strategy addresses all areas of Government policy, and of economic and societal activity, which impact on the environment. It seeks to re-orientate policies as necessary to ensure that the strong growth Ireland enjoys and seeks to maintain will be environmentally sustainable. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Landscape Strategy for Ireland 2015-2025 and National Landscape Character Assessment (pending preparation)	<ul style="list-style-type: none"> 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: <i>"Our landscape reflects and embodies our cultural values and our shared natural heritage and contributes to the well-being of our society, environment and economy. We have an obligation to ourselves and to future generations to promote its sustainable protection, management and planning."</i> 	The objectives of the National Landscape Strategy are to: <ul style="list-style-type: none"> 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Hazardous Waste	This Plan sets out the priorities to be pursued over the next six	The revised Plan makes 27 recommendations under the following topics:	Where new land use developments or

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Management Plan (EPA) 2014-2020	<p>years and beyond to improve the management of hazardous waste, taking into account the progress made since the previous plan and the waste policy and legislative changes that have occurred since the previous plan was published. Section 26 of the Waste Management Act 1996 as amended, sets out the overarching objectives for the National Hazardous Waste Management Plan. In this context, the following objectives are included as priorities for the revised Plan period:</p> <ul style="list-style-type: none"> To prevent and reduce the generation of hazardous waste by industry and society generally; To maximise the collection of hazardous waste with a view to reducing the environmental and health impacts of any unregulated waste; To strive for increased self-sufficiency in the management of hazardous waste and to minimise hazardous waste export; To minimise the environmental, health, social and economic impacts of hazardous waste generation and management. 	<ul style="list-style-type: none"> Prevention Collection Self-sufficiency Regulation Legacy issues North-south cooperation Guidance and awareness Implementation 	<p>activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
Ministerial Guidelines such as Sustainable Rural Housing Guidelines and Flood Risk Management Guidelines	<ul style="list-style-type: none"> The Department produces a range of guidelines designed to help planning authorities, An Bord Pleanála, developers and the general public and cover a wide range of issues amongst others, architectural heritage, child care facilities, landscape, quarries and residential density. 	<ul style="list-style-type: none"> The Minister issues statutory guidelines under Section 28 of the Act which planning authorities and An Bord Pleanála are obliged to have regard to in the performance of their planning functions. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
HSE Healthy Ireland Framework for Improved Health and Wellbeing 2013-2025	<ul style="list-style-type: none"> The vision is: <i>“A Healthy Ireland, where everyone can enjoy physical and mental health and wellbeing to their full potential, where wellbeing is valued and supported at every level of society and is everyone’s responsibility.”</i> 	<p>These four goals are interlinked, interdependent and mutually supportive:</p> <ul style="list-style-type: none"> Goal 1: Increase the proportion of people who are healthy at all stages of life Goal 2: Reduce health inequalities Goal 3: Protect the public from threats to health and wellbeing Goal 4: Create an environment where every individual and sector of society can play their part in achieving a healthy Ireland 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
Our Sustainable Future: A framework for Sustainable Development for Ireland 2012	<p>A medium to long term framework for advancing sustainable development and the green economy in Ireland. It identifies spatial planning as a key challenge for sustainable development and sets a series of measures to address these challenges.</p>	<ul style="list-style-type: none"> Sets out the challenges facing us and how we might address them in making sure that quality of life and general wellbeing can be improved and sustained in the decades to come. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

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<p>Smarter Travel – A Sustainable Transport Future – A New Transport Policy for Ireland 2009 – 2020 (2009)</p>	<ul style="list-style-type: none"> • Outlines a policy for how a sustainable travel and transport system can be achieved. • Sets out five key goals: <ul style="list-style-type: none"> ○ To reduce overall travel demand. ○ To maximise the efficiency of the transport network. ○ To reduce reliance on fossil fuels. ○ To reduce transport emissions. ○ To improve accessibility to transport. 	<ul style="list-style-type: none"> • Others lower level aims include: <ul style="list-style-type: none"> ○ 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 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Investing in our Future: A Strategic Framework for Investment in Land Transport (SFILT) – Department of Transport, Tourism and Sport</p>	<ul style="list-style-type: none"> • SFILT sets out a set of priorities to guide the allocation of the State's investment to best develop and manage Ireland's land transport network over the coming decades. 	<p>The three priorities stated in SFILT are:</p> <ul style="list-style-type: none"> • 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. <p>In delivering on the steady state maintenance objective set out in SFILT, the Plan includes for:</p> <ul style="list-style-type: none"> • 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Delivering a Sustainable Energy Future for Ireland – The Energy Policy Framework 2007 – 2020 (2007)</p>	<ul style="list-style-type: none"> • White paper setting out a framework for delivering a sustainable energy future in Ireland. • Outlines strategic Goals for: <ul style="list-style-type: none"> ○ Security of Supply ○ Sustainability of Energy ○ Competitiveness of Energy Supply 	<p>The underpinning Strategic Goals are:</p> <ul style="list-style-type: none"> • 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 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>National Adaptation Framework (NAF) 2018 and associated regional, local and sectoral adaptation plans</p>	<ul style="list-style-type: none"> • NAF specifies the national strategy for the application of adaptation measures in different sectors and by local authorities in their administrative areas in order to reduce the vulnerability of the State to the negative effects of climate change and to avail of any positive effects that may occur 	<ul style="list-style-type: none"> • 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 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>National Renewable Energy Action Plan (2010)</p>	<ul style="list-style-type: none"> • 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 	<p>Including Ireland's 16% target of gross final consumption to come from renewables by 2020.</p>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-</p>

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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
	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 Action Plan for Ireland (2009 – 2020)	<ul style="list-style-type: none"> This is the second National Energy Efficiency Action Plan for Ireland. 	<ul style="list-style-type: none"> The Plan reviews the original 90 actions outlined in the first Plan and updates/renews/removes them as appropriate. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Wildlife Act of 1976 Wildlife (Amendment) Act, 2000	<ul style="list-style-type: none"> The act provides protection and conservation of wild flora and fauna. 	<ul style="list-style-type: none"> Provides protection for certain species, their habitats and important ecosystems Give statutory protection to NHAs Enhances wildlife species and their habitats Includes more species for protection 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Actions for Biodiversity (2017-2021) Ireland's National Biodiversity Plan	<ul style="list-style-type: none"> Sets out strategic objectives, targets and actions to conserve and restore Ireland's biodiversity and to prevent and reduce the loss of biodiversity in Ireland and globally. 	<ul style="list-style-type: none"> To mainstream biodiversity in the decision-making process across all sectors. To substantially strengthen the knowledge base for conservation, management and sustainable use of biodiversity. To increase awareness and appreciation of biodiversity and ecosystem services. To conserve and restore biodiversity and ecosystem services in the wider countryside. To conserve and restore biodiversity and ecosystem services in the marine environment. To expand and improve on the management of protected areas and legally protected species. To substantially strengthen the effectiveness of international governance for biodiversity and ecosystem 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Broadband Plan (2012)	<ul style="list-style-type: none"> Sets out the strategy to deliver high speed broadband throughout Ireland. 	<p>The Plan sets out:</p> <ul style="list-style-type: none"> A clear statement of Government policy on the delivery of High-Speed Broadband. Specific targets for the delivery and rollout of high-speed broadband and the speeds to be delivered. The strategy and interventions that will underpin the successful implementation of these targets. A series of specific complementary measures to promote implementation of Government policy in this area. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users

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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
<p>European Communities (Water Policy) Regulations of 2003 (SI 722 of 2003)</p> <p>European Communities (Water Policy) Regulations of 2003 (SI 350 of 2014)</p> <p>European Communities Environmental Objectives (Surface waters) Regulations of 2009 (SI 272 of 2009)</p>	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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. 	<p>and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p> <p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>European Communities Environmental Objectives (Groundwater) Regulations of 2010 (SI 9 of 2010)</p>	<ul style="list-style-type: none"> • Transpose the requirements of the Groundwater Directive 2006/118/EC into Irish Legislation. 	<ul style="list-style-type: none"> • 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Water Pollution Acts 1977 to 1990</p>	<ul style="list-style-type: none"> • The Water Pollution Acts allow Local Authorities the authority regulate and supervise actions relating to water in their division. 	<p>The Water Pollution Acts enable local authorities to:</p> <ul style="list-style-type: none"> • 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Water Services Act 2007</p> <p>Water Services (Amendment) Act 2012</p> <p>Water Services Act (No. 2) 2013</p>	<ul style="list-style-type: none"> • 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. 	<p>Key strategic objectives include:</p> <ul style="list-style-type: none"> • Ensuring Irish Water delivers infrastructural projects that meet key public health, environmental and economic objectives in the water services sector. • Ensuring the provision of adequate water and sewerage services in the gateways and hubs listed in the National Spatial Strategy, and in other locations where services need to be enhanced. • Ensuring good quality drinking water is available to all consumers of public and group water supplies, in compliance with national and EU drinking water standards • Ensuring the provision of the remaining infrastructure needed to provide secondary waste water treatment, for compliance with the requirements 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental</p>

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Irish Water's Water Services Strategic Plan 2015 and associated Proposed Capital Investment Plan (2014-2016)	<ul style="list-style-type: none"> 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. 	<p>Six strategic objectives as follows:</p> <ul style="list-style-type: none"> 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. 	<p>protection and management.</p> <p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
Raised Bog SAC Management Plan and Review of Raised Bog Natural Heritage Areas	<ul style="list-style-type: none"> Aims to meet nature conservation obligations while having regard to national and local economic, social and cultural needs 	<ul style="list-style-type: none"> 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
Food Harvest 2020	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Seeks for the improvement of all agricultural sectors at all levels in terms of sustainability, environmental consideration and marketing development. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
Agri-vision 2015 Action Plan	<p>Outlines the vision for agricultural industry to improve competitiveness and response to market demand while respecting and enhancing the environment</p>	<p>not applicable</p>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

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<p>Rural Environmental Protection Scheme (REPS)</p> <p>Agri-Environmental Options Scheme (AEOS)</p> <p>Green, Low-Carbon, Agri-environment Scheme (GLAS)</p>	<ul style="list-style-type: none"> • Agri-environmental funding schemes aimed at rural development for the environmental enhancement and protection. • GLAS is the new replacement for REPS and AEOS which are both expiring. 	<ul style="list-style-type: none"> • 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>National Rural Development Programme</p>	<ul style="list-style-type: none"> • The National Rural Development Programme, prepared by the Department of Agriculture, Fisheries and Food, sets out a national programme based on the EU framework for rural development and prioritises improving the competitiveness of agriculture, improving the environment and improving the quality of life in rural areas 	<p>At a more detailed level, the programme also:</p> <ul style="list-style-type: none"> • 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 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>National Forestry Programme (2014-2020)</p>	<ul style="list-style-type: none"> • Represents Ireland's proposals for 100% State aid funding for a new Forestry Programme for the period 2014 – 2020. 	<p>Measures include the following:</p> <ul style="list-style-type: none"> • 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 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>River Basin Management Plan</p>	<ul style="list-style-type: none"> • River Basin Management Plans set out the measures planned to maintain and improve the status of waters. 	<ul style="list-style-type: none"> • 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>National Peatlands Strategy (2015-2025)</p>	<p>This Strategy aims to provide a long-term framework within which all of the peatlands within the State can be managed responsibly in order to optimise their social, environmental and economic contribution to the well-being of this and future generations.</p>	<p>Objectives of the Strategy:</p> <ul style="list-style-type: none"> • To give direction to Ireland's approach to peatland management. • To apply to all peatlands, including peat soils. • To ensure that the relevant State authorities and state-owned companies that influence such decisions contribute to meeting cross-cutting objectives and obligations in their policies and 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to</p>

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		<p>actions.</p> <ul style="list-style-type: none"> To ensure that Ireland's peatlands are sustainably managed so that their benefits can be enjoyed responsibly. 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. 	<p>comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Flood Risk Management Plans arising from National Catchment Flood Risk Assessment and Management Programme</p>	<ul style="list-style-type: none"> 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. 	<p>CFRAM Studies have been undertaken for all River Basin Districts. The studies are focusing on areas known to have experienced flooding in the past and areas that may be subject to flooding in the future either due to development pressures or climate change. Flood Risk and Hazard mapping, including Flood Extent Mapping, was finalised in 2017. The final outputs from the studies are the CFRAM Plans, finalised in 2018. The Plans define the current and future flood risk in the River Basin Districts and set out how this risk can be managed.</p>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Draft National Bioenergy Plan 2014 - 2020</p>	<p>The Draft Bioenergy Plan sets out a vision as follows:</p> <ul style="list-style-type: none"> 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. 	<p>Three high level goals, of equal importance, based on the concept of sustainable development are identified:</p> <ul style="list-style-type: none"> 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Draft Renewable Electricity Policy and Development Framework (DCCAE) 2016</p>	<p>Goal: To optimise the opportunities in Ireland for renewable electricity development on land at significant scale, to serve both the All Island Single Electricity Market and any future regional market within the European Union, in accordance with European and Irish law, including Directive 2009/28/EC: On the promotion of the use of energy from renewable resources.</p>	<p>Objective: To develop a Policy and Development Framework for renewable electricity generation on land to serve both the All Island Single Electricity Market and any future regional market within the European Union, with particular focus on large scale projects for indigenous renewable electricity generation. This will, inter alia, provide guidance for planning authorities and An Bord Pleanála.</p>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>National Alternative Fuels Infrastructure for the Transport Sector (DTTAS) 2017- 2030</p>	<p>This Framework sets targets to achieve an appropriate level of alternative fuels infrastructure for transport, which is relative to national policy and Irish market needs. Non-infrastructure-based incentives to support the use of the infrastructure and the uptake of alternative fuels are also included within the scope of the Framework.</p>	<p>Targets for alternative fuel infrastructure include the following:</p> <ul style="list-style-type: none"> AFV forecasts Electricity targets Natural gas (CNG, LNG) targets Hydrogen targets Biofuels targets LPG targets Synthetic and paraffinic fuels targets 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental</p>

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Food Wise 2025 (DAFM)	Food Wise 2025 sets out a ten-year plan for the agri-food sector. It underlines the sector's unique and special position within the Irish economy, and it illustrates the potential which exists for this sector to grow even further.	Food Wise 2025 identifies ambitious and challenging growth projections for the industry over the next ten years including: <ul style="list-style-type: none"> • 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. 	protection and management. Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Cycle Network Scoping Study 2010	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Policy Framework for Alternative Fuels Infrastructure for Transport in Ireland 2017 to 2030	<ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • Reduce overall travel demand • Maximise the efficiency of the transport network • Reduce reliance on fossil fuels • Reduce transport emissions • Improve accessibility to transport <p>These goals remain the cornerstone of transport policy and are fully aligned to the objectives of this National Policy Framework.</p>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Tourism Action Plan 2019-2021	The Tourism Action Plan 2019-2021 sets out actions that the Tourism Leadership Group has identified as priorities to be progressed until 2021 in order to maintain sustainable growth in overseas tourism revenue and employment. Each action involves specific tourism stakeholders, both in the public and private sectors, all of whom we expect to proactively work towards the completion of actions within the specified timeframe.	The Plan contains 27 actions focusing on the following areas: <ul style="list-style-type: none"> • 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

SEA Environmental Report for Relevant Proposed Material Alterations

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Tourism Policy Statement: People, Place and Policy – Growing Tourism to 2025	The main goal of this policy statement is to have a vibrant, attractive tourism sector that makes a significant contribution to employment across the country; is economically, socially and environmentally sustainable; helps promote a positive image of Ireland overseas, and is a sector in which people want to work.	The Tourism Policy Statement sets three headline targets to be achieved by 2025: <ul style="list-style-type: none"> • 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Draft Renewable Electricity Policy and Development Framework (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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Alternative Fuels Infrastructure for the Transport Sector (DTTAS) 2017- 2030	This Framework sets targets to achieve an appropriate level of alternative fuels infrastructure for transport, which is relative to national policy and Irish market needs. Non-infrastructure-based incentives to support the use of the infrastructure and the uptake of alternative fuels are also included within the scope of the Framework.	Targets for alternative fuel infrastructure include the following: <ul style="list-style-type: none"> • 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Regional/ County/Local Level			
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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Integrated Implementation Plan 2019-2024	The 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: <ul style="list-style-type: none"> • 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-

SEA Environmental Report for Relevant Proposed Material Alterations

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	<p>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.</p>	<ul style="list-style-type: none"> • Heavy Rai; • Integration Measures and Sustainable Transport Investment; • Integrated Service Plan; and • Integration and Accessibility. 	<p>combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>NPWS Conservation Plans and/or Conservation Objectives for SACs and SPAs</p>	<p>Management planning for nature conservation sites has a number of aims. These include:</p> <ul style="list-style-type: none"> • To identify and evaluate the features of interest for a site • To set clear objectives for the conservation of the features of interest • To describe the site and its management • To identify issues (both positive and negative) that might influence the site • To set out appropriate strategies/management actions to achieve the objectives 	<ul style="list-style-type: none"> • 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Groundwater Protection Schemes</p>	<ul style="list-style-type: none"> • A Groundwater Protection Scheme provides guidelines for the planning and licensing authorities in carrying out their functions, and a framework to assist in decision-making on the location, nature and control of developments and activities in order to protect groundwater. 	<ul style="list-style-type: none"> • 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Local Economic and Community Plans (LECPs), including the Galway LECP 2016-2022</p>	<ul style="list-style-type: none"> • The overarching vision for each LECP is: “to promote the well-being and quality of life of citizens and communities 	<ul style="list-style-type: none"> • 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>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,</p>	<ul style="list-style-type: none"> • Outline planning objectives for land use development (including transport and tourism objectives). • Strategic framework for planning and sustainable development including those set out in National Planning Framework and Regional Economic and Spatial Strategies. • Set out the policies and proposals to guide development in the specific Local Authority area. 	<ul style="list-style-type: none"> • 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the</p>

SEA Environmental Report for Relevant Proposed Material Alterations

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
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	<ul style="list-style-type: none"> Characterises the geographical dimension of the landscape. 	<ul style="list-style-type: none"> 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
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.	<p>Actions are specified under the following five themes:</p> <ul style="list-style-type: none"> community engagement; education and training; research and information; Galway County Council: people, property and works; and stakeholder engagement and pursuing opportunities with other partners. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Galway Noise Action Plan 2019-2023	<ul style="list-style-type: none"> 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. 	<p>The main purpose of Noise Action Plans is to:</p> <ul style="list-style-type: none"> Inform and consult the public about noise exposure, its effects and the measures which may be considered to address noise problems Address strategic noise issues by requiring competent authorities to draw up action plans to manage noise issues and their effects Reduce noise, where possible, and maintain the environmental acoustic quality where it is good 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Galway County Council's Climate Adaptation Strategy 2019-2024	The Strategy is developed around 4 key themes/goals: <ol style="list-style-type: none"> Critical Buildings & Infrastructure Natural and Cultural Heritage Water Resources & Flood Risk Management Community Services 	<p>The Galway County Council Climate Change Adaptation Strategy 2019-2024 seeks to:</p> <ul style="list-style-type: none"> 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

SEA Environmental Report for Relevant Proposed Material Alterations

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Local Authority Renewable Energy Strategy (LARES)	The Strategy sets out the framework for the delivery of sustainable and renewable energies throughout the County.	<ul style="list-style-type: none"> The LARES outlines the potential for a range of renewable energy resources and developments and acknowledges the significant contribution that they can make to the county in terms of energy security, reduced reliance on traditional fossil fuels, enabling future energy exports, meeting assigned national targets and the transition to a low carbon economy. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
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.	<ul style="list-style-type: none"> To manage wastes in a safe and compliant manner, a clear strategy, policies and actions are required. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Fáilte Ireland Tourism plans, strategies, including those relating to the 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Various existing, planned and emerging projects provided for by the above plans and programmes	These projects have been provided for by higher-level plans and programmes.	These projects will contribute towards the development of the area to which the Plan relates and/or wider area and will contribute towards environmental protection and management.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Appendix II SEA Screening Report

SCREENING FOR STRATEGIC ENVIRONMENTAL ASSESSMENT REPORT

FOR
PROPOSED MATERIAL ALTERATIONS
TO THE
DRAFT
DRAFT TUAM LOCAL AREA PLAN
2023-2029

for: Galway County Council

Áras an Chontae
Prospect Hill
Galway



Comhairle Chontae na Gaillimhe
Galway County Council

by: CAAS Ltd.

1st Floor
24-26 Ormond Quay Upper
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JUNE 2023

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Section 1 Introduction and Background

1.1 Introduction

This is the Strategic Environmental Assessment (SEA) Screening Report for the Proposed Material Alterations to the Draft Tuam Local Area Plan (LAP) 2023-2029 hereafter referred to as the "Draft Plan".

SEA is the formal, systematic evaluation of the likely significant environmental effects of implementing a plan or programme, or alteration to a plan or programme, before a decision is made to adopt it. The SEA Directive¹ requires, inter alia, that SEA is undertaken for certain plans, programmes or alterations to these. Screening is the process for deciding whether a particular plan - or alteration to a plan -, other than those for which SEA is mandatory, would be likely to have significant environmental effects, and would thus warrant SEA.

The purpose of this report is to inform whether or not to undertake SEA on the Proposed Material Alterations to the Tuam LAP. Requirements in relation to the screening of Proposed Material Alterations/Proposed Amendments to LAPs are provided under Section 20 (3) of the Planning and Development Act 2000, as amended, and Article 8 of the Planning and Development (SEA) Regulations 2004, as amended.

This report should be read in conjunction with the LAP and all other associated documents including the:

- Proposed Material Alterations to the Draft Tuam LAP 2023-2029;
- Screening Appropriate Assessment (AA) Report for Proposed Material Alterations to the Draft Tuam LAP 2023-2029;
- SEA Environmental Report for the Draft Tuam LAP 2023-2029; and
- AA Natura Impact Report for the Draft Tuam LAP 2023-2029.

1.2 Process so far

The LAP has been progressed to date in compliance with Sections 19 and 20 of the Planning and Development Act 2000, as amended.

SEA² is being undertaken on and has informed the Draft LAP in order to comply with the SEA Directive and transposing Regulations – the SEA Environmental Report that accompanied the Draft LAP on public display contains the findings of the assessment.

AA³ is also being undertaken on the Draft LAP (informing both the Draft LAP and the SEA) in order to comply with the Habitats Directive and transposing Regulations. An AA Natura Impact Report was prepared that contains the findings of this assessment and accompanied the Draft LAP on public display.

The Draft LAP associated SEA and AA documents were placed on public display and submissions were invited. Submissions were responded to in a Chief Executive's Report and Elected Members decided upon Proposed Material Alterations to the Draft LAP and these are the subject of this report.

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

² Strategic Environmental Assessment is the formal, systematic evaluation of the likely significant environmental effects of implementing a plan or programme, or alteration to a plan or programme, before a decision is made to adopt it.

³ Appropriate Assessment is an impact assessment process concerning European Sites designated on foot of habitats and species.

1.3 SEA Environmental Report (February 2023)

The SEA Environmental Report for the LAP contains the information specified in Annex I of the SEA Directive and Schedule 2B of the Planning and Development (SEA) Regulations 2004 (S.I. 436 of 2004) as amended. The relevant sections of the SEA Environmental Report that address these information requirements are detailed on Table 1.1 below.

The assessment undertaken on relevant Proposed Material Alterations (the findings of which are presented later in this document) has used the information contained in the SEA Environmental Report.

Table 1.1 Information contained within the SEA Environmental Report that accompanies the Local Area Plan

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

Section 2 SEA Screening

2.1 Introduction

The section examines whether each Proposed Material Alteration to the LAP would be likely to have significant environmental effects (and thus would warrant the undertaking of SEA).

This examination takes account of relevant criteria set out in Schedule 2A '*Criteria for determining whether a plan is likely to have significant effects on the environment*' of the Planning and Development (SEA) Regulations, as amended, (see Section 2.5).

2.2 Strategic Flood Risk Assessment

Strategic Flood Risk Assessment (SFRA) is being undertaken to inform the preparation of the Draft Plan and has informed this SEA Screening. An SFRA document detailing changes to the original SFRA that was placed on public display alongside the Draft Plan on foot of submissions and providing more detail on the SFRA implications of Proposed Material Alterations is included as Appendix A to this SEA Screening document.

2.3 Appropriate Assessment

Appropriate Assessment (AA) is an impact assessment process concerning *Natura 2000*, or *European*, sites - these sites have been designated or proposed for designation by virtue of their ecological importance. The Habitats Directive⁴, its transposing Birds and Natural Habitats Regulations 2011 (as amended) and the Planning and Development Act 2000 (as amended) provide the requirement to screen for effects on European Sites. If the effects are deemed to be *significant, potentially significant or uncertain* then Stage 2 AA must be undertaken.

The Local Area Plan is being subject to Stage 2 AA and an AA Natura Impact Report was placed on public display alongside the Draft Plan. At adoption of the Plan, the AA Natura Impact Report will be finalised and an AA determination made by the Council.

An AA screening process has been undertaken on the Proposed Material Alterations. This process has determined that Stage 2 AA for certain Alterations is not necessary - a Screening for AA Report contains these findings, has informed this SEA Screening Report and accompanies the Proposed Material Alterations.

2.4 Screening Analysis of Proposed Material Alterations

The analysis of Proposed Material Alterations is undertaken considering interactions Strategic Environmental Objectives (see Table 2.1). Table 2.2 examines whether each part of the Proposed Material Alterations would be likely to have significant environmental effects (and thus would warrant the undertaking of SEA).

Table 2.2 is supplemented by Table 2.3 which provides details on:

- Likely significant effects of implementing the Draft Plan, if unmitigated;
- Key mitigation measure(s) that are already contained within the Draft Plan; and
- Likely residual non-significant adverse effects arising from the Draft Plan.

⁴ Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora

Effects encompass the full range of effects⁵, including those arising cumulatively – such as those potentially arising as a result of interactions with other plans and programmes.

The examination of Proposed Material Alterations also takes into account relevant criteria set out in Schedule 2A 'Criteria for determining whether a plan is likely to have significant effects on the environment' of the SEA Regulations, as amended, (see Section 2.5).

Table 2.1 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	<ul style="list-style-type: none"> 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 and Human Health	PHH	Improve quality of life for all ages and abilities based on high-quality, serviced, well connected and sustainable residential, working, educational and recreational environments	<ul style="list-style-type: none"> 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 environment-related pressures and risks to health and well-being
Soil (and Land)	S	Ensure the long-term sustainable management of land	<ul style="list-style-type: none"> 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
Water	W	Protection, improvement and sustainable management of the water resource	<ul style="list-style-type: none"> 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	MA	Sustainable and efficient use of natural resources	<ul style="list-style-type: none"> 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

⁵ These include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives
			<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	C	Achieving transition to a competitive, low carbon, climate-resilient economy that is cognisant of environmental impacts	<ul style="list-style-type: none"> • 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	CH	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 2.2 SEA Screening Analysis of Proposed Material Alterations⁶

Ref	SEA Screening Consideration
1	This alteration would further contribute towards provisions related to this sector/topic that are already contained within the Draft Plan. Considering the measures that have been already integrated into the Draft Plan and the existing Galway County Development Plan 2022-2028 that provide for and contribute towards environmental protection, environmental management and sustainable development, it is determined that all potential effects arising from this Proposed Alteration: either are present already (beneficial) and will be further contributed towards; and/or will be mitigated so as not to be significant (adverse). Consequently, SEA is not required. Refer also to Table 2.3 and Section 2.5.
2	The update to terminology/language/wording/mapping would not change the effects arising from the Plan. Where the change relates to mapping, the implications of the change may have been considered under other related Alterations. As such, this alteration would not be considered as being likely to result in significant environmental effects. Consequently, SEA is not required.
3	This alteration relates to Plan text that sets the context for, summarises and/or provides clarification to Plan provisions. It does not interact with existing Plan provisions to an extent that it would have additional significant environmental effects. Consequently, SEA is not required.
4	This alteration adds more detail but would not have the potential to result in significant environmental effects. Consequently, SEA is not required.
5	This alteration provides consistency with other parts of the Plan and/or with the wider planning and policy framework. It would not interact with Plan provisions to the extent that it would have environmental effects. Consequently, SEA is not required.
6	Removal of this provision/text would remove the potential for any environmental effects; however, removal of the provision/text would not be likely to result in any environmental effects. Consequently, SEA is not required.
7	These alterations relate to supporting documents but would not change Plan provisions. Consequently, SEA is not required.
8	This alteration is related to the zoning of lands that include those at higher risk of flooding as identified by the SFRA. The zoning needs further consideration in an SEA. Taking this into account, SEA is required.
9	This alteration would not provide the most evidence-based framework for development in compliance with the Core Strategy of the County Development Plan and therefore has the potential to undermine sustainable development and proper planning - with potential for associated unnecessary adverse environmental effects on various environmental components. Taking this into account, SEA is required.

No.	SEA Screening Consideration Ref. – see above	No.	SEA Screening Consideration Ref. – see above
MA1	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA32	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA2	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA33	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA3	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA34	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA4	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA35	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA5	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA36	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA6	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA37	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA7	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA38	Ref. 9 – SEA required
MA8	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA39	Ref. 8 – SEA required
MA9	Ref. 8 – SEA required	MA40	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA10	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA41	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA11	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA42	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA12	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA43	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA13	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA44	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA14	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA45	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA15	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA46	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA16	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA47	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA17	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA48	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA18	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA49	Ref. 9 – SEA required
MA19	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA50	Ref. 8 – SEA required
MA20	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA51	Ref. 8 – SEA required
MA21	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA52	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA22	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA53	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA23	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA54	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA24	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA55	Ref. 8 – SEA required
MA25	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA56	Ref. 8 – SEA required
MA26	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA57	Ref. 9 – SEA required
MA27	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA58	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA28	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA59	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA29	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA60	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA30	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA61	Selection of Considerations from Ref. 1 to 7 - SEA not required
MA31	Selection of Considerations from Ref. 1 to 7 - SEA not required	MA62	Selection of Considerations from Ref. 1 to 7 - SEA not required

⁶ For detail on Proposed Material Alterations please refer to Proposed Material Alterations document.

Screening for SEA Report for Proposed Material Alterations

Table 2.3 Detail of effects⁷, if unmitigated, mitigation measures for potential effects and residual adverse effects

Environmental Component	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non-Significant Effects	Mitigation Measures, including:	
				From Tuam Draft Local Area Plan: ⁸	From Galway County Development Plan
Various – see below	Various – see below	Various – see below	Various – see below	<p>Strategic 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. 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.</p> <p>TKT 2 Service Led Development Development under the plan shall be preceded by sufficient capacity in the public wastewater infrastructure and potable water infrastructure.</p> <p>TKT 3 Environmental Assessment To require the preparation and assessment of all planning applications in the plan area to have regard to the information, data and requirements of the Appropriate Assessment Natura Impact Report, SEA Environmental Report and Strategic Flood Risk Assessment Report that accompany this LAP.</p> <p>TKT 5 Residential Development Phasing Support the development of lands designated as Residential (Phase 1) within the lifetime of the plan, subject to normal planning, access and servicing requirements, and reserve the lands designated as Residential (Phase 2) for the longer-term growth needs of Tuam. Residential (Phase 2) lands are generally not developable for housing within the lifetime of this plan, with the exception of the following developments, which may be considered by the Planning Authority, subject to a suitable evidence based case being for the proposal: (refer to Draft Plan for more detail)</p> <p>TKT 6 Residential Infill Development Within the town centre, small scale limited infill housing development will be considered on appropriate sites. These infill sites shall have regard to the existing character of the street, respecting the existing building line, scale, proportions, layout, heights and materials of surrounding developments. A proposed site must have a safe means of access and egress and comply with development management standards for new dwellings.</p> <p>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</p>	<p>MM1 Monitoring. The Council shall, in conjunction with the Regional Assembly and other sources as relevant, implement the monitoring programme as set out in the SEA Environmental Report and Statement. This will include the preparation of stand-alone SEA Monitoring Reports:</p> <p>1. To accompany the report required of the manager under section 15(2) of the Act, including information in relation to progress on, and the results of, monitoring the significant environmental effects of implementation of the Development Plan</p> <p>2. On the significant environmental effects of implementing the Plan, in advance of the beginning of the review of the next Plan.</p> <p>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; and Stage 2 – Route Identification, Evaluation and Selection.</p> <p>WM 5 Construction and Environmental Management Plans. Construction Environment Management Plans shall be prepared in advance of the construction of relevant projects and implemented throughout. Such plans shall incorporate relevant mitigation measures which have been integrated into the Plan and any lower tier Environmental Impact Statement or Appropriate Assessment. CEMPs typically provide details of intended construction practice for the proposed development, including:</p> <p>a) location of the sites and materials compound(s) including area(s) identified for the storage of construction refuse;</p> <p>b) location of areas for construction site offices and staff facilities;</p> <p>c) details of site security fencing and hoardings;</p> <p>d) details of on-site car parking facilities for site workers during the course of construction;</p> <p>e) details of the timing and routing of construction traffic to and from the construction site and associated directional signage;</p> <p>f) measures to obviate queuing of construction traffic on the adjoining road network;</p> <p>g) measures to prevent the spillage or deposit of clay, rubble or other debris;</p> <p>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 site development works;</p> <p>i) details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels;</p> <p>j) containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained (such bunds shall be roofed to exclude rainwater);</p> <p>k) disposal of construction/demolition waste and details of how it is proposed to manage excavated soil, including compliance with 2006 Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects, Department of the Environment, Heritage and Local Government;</p> <p>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.</p> <p>WM 6 Waste Management. To continue to meet the duties under the Waste Management (certification of historic unlicensed waste disposal and recovery activity) Regulations 2008, including those in relation to the identification and registration of closed landfills.</p> <p>WM7 Recycling Infrastructure. To provide for the provision of recycling infrastructure throughout the county where it is considered necessary and support the provision of additional recycling infrastructure throughout the county.</p> <p>WM 8 Sustainable Waste Management Practices. Promote and facilitate communities to become involved in environmental awareness activities and community based recycling initiatives or environmental management initiatives that will lead to local sustainable waste management practices.</p> <p>WM 9 Separate Collection of Waste. Encourage and support the provision of separate collection of waste in accordance with the requirements of the Waste Management (Food Waste) Regulations 2009, the Waste Framework Directive Regulations, 2011 and other relevant legislation.</p> <p>MAS 1 Separation Distances from SEVESO Sites. To ensure that appropriate distances are maintained between any proposed development and any existing Seveso II establishment, in the interest of the health and safety of the occupiers of the proposed development.</p> <p>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 involving hazardous substances and safeguard both the public and the environment.</p> <p>MAS 3 SEVESO III Sites. Take into account the provisions of the Major Accidents Directive, relating to the control of major accident hazards involving dangerous substances, and the recommendations of the Health and Safety Authority in the</p>

⁷ Effects include in-combination effects that are planned for through the wider planning framework including the NPF and associated NDP, the Northern and Western RSES, the Galway County Development Plan 2021-2027 and adjacent Development Plans and lower-tier land use plans.

⁸ May be updated to take account of Proposed Material Alterations and any Further Modifications, in advance of Plan adoption.

Screening for SEA Report for Proposed Material Alterations

Environmental Component	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non-Significant Effects	Mitigation Measures, including:	
				From Tuam Draft Local Area Plan: ⁸	From Galway County Development Plan
				<p>Residential Phase 1 lands within the LAP boundary, subject to the principles of proper planning and sustainable development and the current County Development Plan.</p> <p>TKT 8 Town Centre</p> <p>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.</p> <p>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.</p> <p>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 Planning Authority do not contribute to the vitality and viability of the town centre.</p> <p>TKT 15 Tourism Development</p> <p>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.</p> <p>TKT 24 Tuam Regeneration Masterplan</p> <p>It is a policy objective of Galway County Council to support and facilitate the implementation of the Tuam Regeneration Masterplan.</p> <p>TKT 57 Development Management Standards and Guidelines</p> <p>Ensure that the general development management standards and guidelines set out in the current <i>Galway County Development Plan 2022-2028</i>, 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 proposals in the plan area.</p>	<p>assessment of all planning applications located within the consultation distance of such sites.</p> <p>TI 4 Tourism and Infrastructure Capacity. The potential environmental effects of a likely increase in tourists/tourism-related traffic volumes in particular locations/along particular routes shall be considered and mitigated as appropriate. Such a consideration should include potential impacts on existing infrastructure (including drinking water, wastewater, waste and transport) resulting from tourism proposals. Galway County Council will support Irish Water and Fáilte Ireland to ensure that tourism is serviced by adequate and appropriate water services infrastructure.</p> <p>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.</p> <p>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 wetlands are not compromised by inappropriate development.</p> <p>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.</p> <p>(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;</p> <p>(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.</p> <p>MCC 3 Protection of Coastal Area. It is a policy objective to protect the Coastal Area through the following measures:</p> <p>(a) Ensure that conservation works undertaken in coastal areas are in accordance with best practice and measures to protect the coast, the coastal edge and coastal habitats are supported;</p> <p>(b) Seek to prevent the unauthorised removal of sand and related beach material;</p> <p>(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 and Green Coasts and to increase the number of beaches and coasts holding this status in the future;</p> <p>(d) Facilitate an Integrated Coastal Zone Management approach to ensure the conservation, management and protection of man-made and natural resources of the coastal zone;</p> <p>MCC 4 Integrated Framework Management Plan. Support the preparation of an Integrated Galway Bay Framework Management Plan by all relevant stakeholders to provide for the sustainable and integrated development of the Galway Bay Area in a co-ordinated manner</p> <p>GICT 3 Tourism Development within An Gaeltacht 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 enhances the cultural, built and natural heritage and local amenities of the area;</p> <p>(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 manage any increase in visitor numbers in order to avoid significant effects including loss of habitat and disturbance and ensuring that any new projects, such as greenways, are developed at suitable locations.</p> <p>AD1 Sustainable Agriculture Practices. To facilitate the development of sustainable agricultural practices and facilities within the county, subject to complying with best practice guidance, normal planning and environmental criteria and the development management standards in Chapter 15 Development Management and Standards.</p> <p>AD3 Modernisation of Agriculture Buildings. To facilitate the modernisation of agriculture and to encourage best practice in the design and construction of new agricultural buildings and installations to protect the environment, natural and built heritage and residential amenity.</p>
Biodiversity and Flora and Fauna	<ul style="list-style-type: none"> 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 	<p>Arising from both construction and operation of development and associated infrastructure:</p> <ul style="list-style-type: none"> Loss of/damage to biodiversity in designated sites (including 	<ul style="list-style-type: none"> 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 	<p>TKT 14 Open Space/ Recreation & Amenity</p> <p>Promote the sustainable management, use and/or development, as appropriate, of open space/recreation and amenity lands. This will include:</p> <ul style="list-style-type: none"> 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 	<p>Also refer to detailed measures for settlements contained in Volume 2 of the Plan.</p> <p>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.</p> <p>LP 2 Lighting and Climate Action. To require the use of low energy LED (or equivalent) lighting in support of Climate Action.</p> <p>LP 3 Dark Skies. To encourage the maintenance of dark skies in rural areas and to limit light pollution in urban and rural areas.</p> <p>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 sites (SACs and SPAs) and is planted, managed and harvested in accordance with the Forest Service Guidelines for Landscape,</p>

Screening for SEA Report for Proposed Material Alterations

Environmental Component	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non-Significant Effects	Mitigation Measures, including:	
				From Tuam Draft Local Area Plan: ⁸	From Galway County Development Plan
	<p>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.</p> <ul style="list-style-type: none"> 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 	<p>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;</p> <ul style="list-style-type: none"> 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. 	<p>to ecology (these would be in compliance with relevant legislation).</p>	<p>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;</p> <ul style="list-style-type: none"> 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. <p>TKT 15 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.</p> <p>TKT 40 European Sites Protect European sites that form part of the European Sites network (including Special Protection Areas and Special Areas of Conservation) in accordance with the 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 Draft Plan for more detail)</p> <p>TKT 56 Trees, Parkland/Woodland and Hedgerows</p> <ul style="list-style-type: none"> 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. 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 <i>Forestry Act, 1946</i> (as amended). Carry out a tree survey on important tree stands within the plan area by suitably qualified personnel. 	<p>Forest Harvesting and Environmental, Archaeology, Biodiversity and Water Quality.</p> <p>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.</p> <p>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.</p> <p>F5 Deforestation. To promote the avoidance of deforestation or commercial afforestation within European sites unless directly relating to the management of the site for its qualifying interests.</p> <p>MEQ2 "Protection of the Environment. The Council shall require the following in relation to the management of authorised aggregate extraction</p> <ul style="list-style-type: none"> All quarries shall comply with the requirements of the EU Habitats Directive, the Planning and Development (Amendment) Act 2010 and by the guidance as contained within the DoEHLG Quarries and Ancillary Facilities Guidelines 2004, the EPA Guidelines 'Environmental Management in the Extractive Industry: Non Scheduled Minerals 2006 (including any updated/superseding documents) and to DM Standard 21 of this Development Plan; Require development proposals on or in the proximity of quarry sites, to carry out appropriate investigations into the nature and extent of old quarries (where applicable). Such proposals shall also investigate the nature and extent of soil and groundwater contamination and the risks associated with site development works together with appropriate mitigation; Require Development Proposals to assess the potential impact of extraction in areas where geo-morphological interest, groundwater and important aquifers, important archaeological features and Natural Heritage Areas are located; Have regard to the Landscape Character Assessment of the County and its recommendations; Ensure that any quarry activity has minimal adverse impact on the road network and that the full cost of road improvements, including during operations and at time of closure, which are necessary to facilitate those industries are borne by the industry itself. Ensure that the extraction of minerals or aggregates does not adversely impact on residential or environmental amenity; Protect all known un-worked deposits from development that might limit their scope for extraction." <p>NHB 1 Natural Heritage and Biodiversity of Designated Sites, Habitats and Species. Protect and where possible enhance the natural heritage sites designated under EU Legislation and National Legislation (Habitats Directive, Birds Directive, European Communities (Birds and Natural Habitats) Regulations 2011 and Wildlife Acts) and extend to any additions or alterations to sites that may occur during the lifetime of this plan. Protect and, where possible, enhance the plant and animal species and their habitats that have been identified under European legislation (Habitats and Birds Directive) and protected under national Legislation (European Communities (Birds and Natural Habitats) Regulations 2011 (SI 477 of 2011), Wildlife Acts 1976-2010 and the Flora Protection Order (SI 94 of 1999). Support the protection, conservation and enhancement of natural heritage and biodiversity, including the protection of the integrity of European sites, that form part of the Natura 2000 network, the protection of Natural Heritage 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 green/ ecological network."</p> <p>NHB 2 European Sites and Appropriate Assessment. To implement Article 6 of the Habitats Directive and to ensure that Appropriate Assessment is carried out in relation to works, plans and projects likely to impact on European sites (SACs and SPAs), whether directly or indirectly or in combination with any other plan(s) or project(s). All assessments must be in compliance with the European Communities (Birds and Natural Habitats) Regulations 2011. All such projects and plans will also be required to comply with statutory Environmental Impact Assessment requirements where relevant.</p> <p>NHB 3 Protection of European Sites. No plans, programmes, or projects etc. giving rise to significant cumulative, direct, indirect or secondary impacts on European sites arising from their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted on the basis of this Plan (either individually or in combination with other plans, programmes, etc. or projects.*</p> <p>NHB 4 Ecological Appraisal of Biodiversity. Ensure, where appropriate, the protection and conservation of areas, sites, species and ecological/networks of biodiversity value outside designated sites. Where appropriate require an ecological appraisal, for development not directly connected with or necessary to the management of European Sites, or a proposed European Site and which are likely to have significant effects on that site either individually or cumulatively.</p> <p>NHB 5 Ecological Connectivity and Corridors. Support the protection and enhancement of biodiversity and ecological connectivity in non-designated sites, including woodlands, trees, hedgerows, semi-natural grasslands, rivers, streams, natural springs, wetlands, stonewalls, geological and geo-morphological systems, other landscape features and associated wildlife areas where these form part of the ecological network and/or may be considered as ecological corridors in the context of Article 10 of the Habitats Directive.</p> <p>NHB 6 Implementation of Plans and Strategies. Support the implementation of any relevant recommendations contained in the National Heritage Plan 2030, the National Biodiversity Plan, the All Ireland Pollinator Plan and the National Peatlands Strategy and any such plans and strategies during the lifetime of this plan.</p> <p>NHB 7 Mitigation Measures. Require mitigating measures in certain cases where it is evident that biodiversity is likely to be affected. These measures may, in association with other specified requirements, include establishment of wildlife areas/corridors/parks, hedgerow, tree planting, wildflower meadows/marshes and other areas. With regard to residential development, in certain cases, these measures may be carried out in conjunction with the provision of open space and/or play areas.</p>

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	flora and fauna that they contain.				<p>NHB 8 Increased Awareness of the County's Biodiversity and Natural Heritage. Facilitate increased awareness of the County's biodiversity and natural heritage through the provision of information to landowners and the community generally, in cooperation with statutory and other partners.</p> <p>NHB 9 Protection of Bats and Bats Habitats. Seek to protect bats and their roosts, their feeding areas, flight paths and commuting routes. Ensure that development proposals in areas which are potentially important for bats, including areas of woodland, linear features such as hedgerows, stone walls, watercourses and associated riparian vegetation which may provide migratory/foraging uses shall be subject to suitable assessment for potential impacts on bats. This will include an assessment of the cumulative loss of habitat or the impact on bat populations and activity in the area and may include a specific bat survey. Assessments shall be carried out by a suitably qualified professional and where development is likely to result in significant adverse effects on bat populations or activity in the area, development will be prohibited or require mitigation and/or compensatory measures, as appropriate. The impact of lighting on bats and their roosts and the lighting up of objects of cultural heritage must be adequately assessed in relation to new developments and the upgrading of existing lighting systems.</p> <p>NHB 10 NPWS & Integrated Management Plans. Article 6(1) of the Habitats Directive requires that Member States establish the necessary conservation measures for European sites involving, if need be, appropriate management plans specifically designed for the sites or integrated into other development plans. The NPWS's current priority is to identify site specific conservation objectives; management plans may be considered after this is done. Where Integrated Management Plans are being prepared by the NPWS for European sites (or parts thereof), the NPWS shall be engaged with in order to ensure that plans are fully integrated with the Plan and other plans and programmes, with the intention that such plans are practical, achievable and sustainable and have regard to all relevant ecological, cultural, social and economic considerations, including those of local communities.</p> <p>NHB 11 Increases in Visitor Numbers to Semi-Natural Areas, Visitor and Habitat Management. Seek to manage any increase in visitor numbers in order to avoid significant effects including loss of habitat and disturbance, including ensuring that any new projects, such as greenways, are a suitable distance from ecological sensitivities, such as riparian zones. Where relevant, the Planning Authority and those receiving permission for development under the Plan shall seek to manage any increase in visitor numbers and/or any change in visitor behaviour in order to avoid significant effects, including loss of habitat and disturbance. Management measures may include ensuring that new projects and activities are a suitable distance from ecological sensitivities. Visitor/Habitat Management Plans will be required for proposed projects as relevant and appropriate.</p> <p>WTWF 1 Wetland Sites 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).</p> <p>P 1 Protection of Peatlands. Ensure that peatland areas which are designated (or proposed for designation) as NHAs, SACs or SPAs are conserved for their ecological, climate regulation, education and culture, archaeological potential including any ancient walkways (toghers) through bogs.</p> <p>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.</p> <p>P3 Framework Plans. Seek to support relevant agencies such as Bord na Mona in advancing rehabilitation works for the peatlands and related infrastructure, to provide for the future sustainable and environmentally sensitive use of peatlands sites including for amenity purposes.</p> <p>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.</p> <p>IS 2 Invasive Species Management Plan. Ensure that proposals for development do not lead to the spread or introduction of invasive species. If 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.</p> <p>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 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 the majority of this planting should consist of native plants.</p> <p>TWHS 1 Trees, Hedgerows, Natural Boundaries and Stone Walls Protect and seek to retain important trees, tree clusters and tree boundaries, ancient woodland, natural boundaries including stone walls, existing 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 are suitable for the specific site and use</p>

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					<p>suitable native variety of trees of Irish provenance and hedgerows of native species. Seek Tree Management Plans to ensure that trees are adequately protected during development and incorporated into the design of new developments.</p> <p>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 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.</p> <p>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.</p> <p>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 comply with the European Habitats Directive</p> <p>CT 2 Water Sports To encourage the development of coastal tourism in areas such as water-sports and water-related activities and events subject to normal planning and environmental criteria</p> <p>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.</p> <p>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.</p> <p>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 environmental carrying capacity.</p> <p>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, landscapes, habitats and species; leaving them undiminished as a resource for future generations, while supporting social and economic prosperity.</p> <p>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 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 manage any increase in visitor numbers in order to avoid significant effects including loss of habitat and disturbance and ensuring that any new projects, such as greenways are developed at suitable locations.</p> <p>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.</p>
<p>Population and Human Health</p>	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Potential adverse effects arising from flood events. Potential interactions if effects arising from environmental vectors. 	<ul style="list-style-type: none"> Potential interactions with residual effects on environmental vectors – please refer to residual adverse effects under “Soil”, “Water” and “Air and Climatic Factors” below. 	<p>Also refer to measures under other environmental components including Soil, Water and Air and Climatic Factors.</p> <p>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.</p>	<p>Also refer to measures under other environmental components including Soil, Water and Air and Climatic Factors.</p> <p>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 and Cleaner Air for Europe (CAFE) Directive (2008/50/EC) and ensure that all air emissions associated with new developments are within Environmental Quality Standards as set out in the Air Quality Standards Regulations 2011 (SI No. 180 of 2011) (or any updated/superseding documents).</p> <p>AQ 2 Assessment of Air Quality 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.</p> <p>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.</p> <p>AQ 4 Air Purification Galway County Council shall encourage landscaping and deciduous tree planting in an environmentally sensitive manner within towns and villages as a means of air purification, the filtering of suspended particles and the improvement of their micro-climate.</p> <p>AQ 5 Radon Galway County Council shall have regard, to the specific guidance on radon prevention measures for new homes as</p>

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	<p>(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</p> <ul style="list-style-type: none"> 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. 				<p>contained within the existing Building Regulations (including any updated/superseding Regulations that may be published within the lifetime of this Development Plan).</p> <p>NP 1 Galway County Council Noise Action Plan 2019-2023</p> <p>To implement the Galway County Council Noise Action Plan 2019-2023 (and any subsequent Plan) in order to avoid, prevent and reduce the harmful effects, including annoyance, due to environmental noise exposure.</p> <p>NP 2 Developments within Noise Maps (Noise Action Plan 2019-2023)</p> <p>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.</p> <p>NP3 Noise Impact Assessments</p> <p>To require an assessment of impact of the development on noise levels, having regard to the provisions of the Environmental Protection Agency Acts 1992 and 2003 and the EPA Noise Regulations 1994 when assessing planning application.</p> <p>NP 4 Noise Pollution and Regulation</p> <p>Restrict development proposals causing noise pollution in excess of best practice standards and regulate and control activities likely to give rise to excessive noise, other than those activities which are regulated by the EPA</p> <p>NP 5 Noise Mitigation Measures</p> <p>Require activities likely to give rise to excessive noise to install noise mitigation measures and monitors. The provision of a noise audit may be required where appropriate.</p> <p>SQ 3 Soil Protection, Contamination and Remediation</p> <p>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.</p> <p>MAS 1 Separation Distances from SEVESO Sites</p> <p>To ensure that appropriate distances are maintained between any proposed development and any existing Seveso II establishment, in the interest of the health and safety of the occupiers of the proposed development.</p> <p>MAS 2 Soil Protection Measures</p> <p>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 involving hazardous substances and safeguard both the public and the environment.</p> <p>MAS 3 SEVESO III Sites</p> <p>Take into account the provisions of the Major Accidents Directive, relating to the control of major accident hazards involving dangerous substances, and the recommendations of the Health and Safety Authority in the assessment of all planning applications located within the consultation distance of such sites.</p>
Soil	<ul style="list-style-type: none"> 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- 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 	<p>Also refer to measures under other environmental components including Water.</p>	<p>Also refer to measures under other environmental components including Water.</p> <p>SQ 1 Soil Impact Assessments</p> <p>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.</p> <p>SQ 2 Soil Protection Measures</p> <p>To ensure that adequate soil protection measures are undertaken where appropriate.</p> <p>SQ 3 Soil Protection, Contamination and Remediation</p> <p>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.</p> <p>PG 1 Geological and Geo-Morphological Systems</p> <p>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</p>

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	<p>serviced lands elsewhere in the Plan area and beyond.</p> <ul style="list-style-type: none"> 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. 				<p>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.</p> <p>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).</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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 Cliffs of Moher UNESCO Global Geopark that relate to the county.</p>
Water	<ul style="list-style-type: none"> 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-served 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. 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 	<p>Also refer to measures under other environmental components including Soil and Material Assets.</p> <p>TKT 14 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.</p> <p>TKT 41 Constrained Land Use To facilitate the appropriate management and sustainable use of Flood Risk within the zoning plan area. This zoning indicates where the Plan Making Justification Test may need to be applied and as such can limit new development, while recognising that existing development uses within these zones may require small scale development, as outlined below, over the life of the Local Area Plan, which would contribute towards the compact and sustainable urban development of the town. The underlying zoning or the existing permitted uses may be deemed to be acceptable in principle, however within Flood Zone A/B development is typically limited to extensions, renovations and change of use. Infill highly vulnerable development and demolition and reconstruction can only take place in Flood Zone C. Less vulnerable</p>	<p>Also refer to measures under other environmental components including Soil and Material Assets.</p> <p>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).</p> <p>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.</p> <p>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.</p> <p>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 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.</p> <p>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.</p> <p>WS 4 Requirement to Liaise with Irish Water – Water Supply 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.</p> <p>WS 5 Private Water Supply 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."</p> <p>WS 6 Water Framework Directive 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.</p> <p>WS 7 Water Quality 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.</p> <p>WS 8 Proliferation of Septic Tanks Encourage the use of high standard treatment plants to minimise the risk of groundwater pollution.</p> <p>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.</p> <p>CWS 2 Water Mains Rehabilitation</p>

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				<p>development in Flood Zone B will also need to be considered carefully. These aspects are assessed on a case by case basis under the application of the Plan Making Justification Test and as supported by specific objectives in the written statement.</p> <p>Where the Justification Test is passed there is also a requirement for a detailed Flood Risk Assessment at Development Management stage. The FRA should be carried out in accordance with The Planning System and Flood Risk Assessment Guidelines and Circular PL 2/2014 (or as updated), which shall assess the risks of flooding associated with the proposed development.</p> <p>Specifications for developments in flood vulnerable areas set out in this plan shall be complied with as appropriate.</p> <p>TKT 42 Flood Risk Management Guidelines 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 Regulations (SI No. 122 of 2010) and the DEHLG/OPW publication The Planning System and Flood Risk Management Guidelines (2009) (and any updated/superseding legislation or policy guidance) and Department Circular PL2/2014 or updated/superseding version.</p> <p>TKT 43 Flood Risk Management and Assessment It is a policy objective of the Council to comply with the requirements of the DoEHLG/OPW <i>The Planning System and Flood Risk Management Guidelines for Planning Authorities</i> 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; (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 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 normally be permitted; (d) Galway County Council shall work with other bodies and organisations, as appropriate, to help protect critical infrastructure, including water and wastewater, within the County from risk of flooding.</p> <p>TKT 44 Principles of Flood Risk Management Guidelines The Council shall implement the key principles of flood risk management set out in the Flood Risk</p>	<p>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. 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. 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. 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 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. 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 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. " 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. WW 6 Private Wastewater Treatment Plants 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). 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 measures to 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 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. 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. 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 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 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 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 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 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 It is a policy objective of the Planning Authority to implement the programme of measures developed by the River Basin</p>

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				From Tuam Draft Local Area Plan: ⁸	From Galway County Development Plan
				<p>Management Guidelines as follows:</p> <p>(a) Avoid development that will be at risk of flooding or that will increase the flooding risk elsewhere, where possible;</p> <p>(b) Substitute less vulnerable uses, where avoidance is not possible; and,</p> <p>(c) Mitigate and manage the risk, where avoidance and substitution are not possible.</p> <p>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.</p> <p>TKT 45 Connections to the Public Sewer & Public Water Mains</p> <p>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 approach roads into Tuam.</p> <p>TKT 46 Surface Water Drainage and Sustainable Drainage Systems (SuDs)</p> <p>Maintain and enhance, as appropriate, the existing surface water drainage system in Tuam. Ensure that new developments are adequately serviced with surface water drainage infrastructure and promote the use of Sustainable Drainage Systems in all new developments. Surface water runoff from development sites will be limited to pre-development levels and planning applications for new developments will be required to provide details of surface water drainage and Sustainable Drainage Systems proposals. Refer also to Section 3.5 of the accompanying SFRA, "Sustainable Urban Drainage Systems and Surface Water Guidance and Strategy".</p> <p>TKT 47 Protection of Waterbodies and Watercourses</p> <p>Protect waterbodies and watercourses within the County from inappropriate development, including rivers, streams, associated undeveloped riparian strips, wetlands and natural floodplains. This will include protection buffers in the riverine, wetland and coastal areas as appropriate.</p> <p>To contribute towards protection and improvement of the status of surface and ground waters in accordance with the Water Framework Directive.</p> <p>Applications for development under the Plan must demonstrate that the proposal for development would not adversely affect a water body's ability to meet its objectives under the Water Framework Directive, individually as a result of the proposed development or cumulatively, in combination with other developments.</p> <p>TKT 48 Flood Risk Assessment for Planning Applications and CFRAMS</p> <p>Protect Flood Zone A and Flood Zone B from inappropriate development and direct</p>	<p>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.</p> <p>WTWF 1 Wetland Sites</p> <p>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).</p> <p>IW 1 Inland Waterways</p> <p>(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.</p> <p>(b) Preserve, protect and enhance Galway's inland lakes and waterways for their amenity and recreational resource amenity.</p> <p>(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.</p> <p>(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.</p> <p>(e) Ensure all abstractions of water will be subject to assessment for compliance with the requirements of Article 6 of the Habitats Directive.</p> <p>(f) Seek to provide additional accesses to lake shores and rivers for public rights of way, parking and layby facilities, where appropriate.</p> <p>(g) Developments shall ensure that adequate soil protection measures are undertaken, where appropriate, including investigations into the nature and extent of any soil/groundwater contamination.</p> <p>FL 1 Flood Risk Management Guidelines</p> <p>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 Guidelines (2009) (and any updated/superseding legislation or policy guidance) and Department Circular PL2/2014 or any updated / superseding version.</p> <p>FL 2 Flood Risk Management and Assessment</p> <p>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).</p> <p>This will include the following:</p> <p>(a) Avoid, reduce and/or mitigate, as appropriate in accordance with the Guidelines;</p> <p>(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 necessary to address these impacts;</p> <p>(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 normally be permitted;</p> <p>(d) Galway County Council shall work with other bodies and organisations, as appropriate, to help protect critical infrastructure, including water and wastewater, within the County, from risk of flooding.</p> <p>FL 3 Principles of the Flood Risk Management Guidelines</p> <p>The Planning Authority shall implement the key principles of flood risk management set out in the Flood Risk Management Guidelines as follows:</p> <p>(a) Avoid development that will be at risk of flooding or that will increase the flooding risk elsewhere, where possible;</p> <p>(b) Substitute less vulnerable uses, where avoidance is not possible; and</p> <p>(c) Mitigate and manage the risk, where avoidance and substitution are not possible.</p> <p>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</p> <p>FL 4 Flood Relief Schemes</p> <p>The Planning Authority shall support and co-operate with the Office of Public Works (OPW) in the delivery of Flood Relief Schemes.</p> <p>FL 5 Catchment Planning</p> <p>The Planning Authority will support the OPW'S CFRAM Programme and catchment-based Flood Planning Groups, especially</p>

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				<p>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 guidance contained in Development Management Standards 2 and 3. 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 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 management of any residual risks. The Council shall have regard to the results of any CFRAM Studies in the assessment of planning applications. Where a development/land use 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.</p> <p>TKT 49 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 Assessment of Potential Future Scenarios for Flood Risk Management (or any superseding document) shall be consulted with to this effect.</p> <p>TKT 50 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.</p> <p>TKT 51 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.</p> <p>TKT 52 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 OPE Climate Change Sectoral Adaptation Plan for Flood Risk Management applicable at the time.</p>	<p>where catchments go 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.</p> <p>FL 6 Surface Water Drainage and Sustainable Drainage Systems (SuDs) Maintain and enhance, as appropriate, the existing surface water drainage system in the County. Ensure that new developments are adequately 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 details of surface water drainage and sustainable drainage systems proposals.</p> <p>FL 7 Protection of Waterbodies and Watercourses Protect waterbodies and watercourses within the County from inappropriate development, including rivers, streams, associated undeveloped riparian strips, wetlands and natural floodplains. This will include protection buffers in riverine, wetland and coastal areas as appropriate.</p> <p>FL 8 Flood Risk Assessment for Planning Applications and CFRAMS 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 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 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 management of any residual risks. The Planning Authority shall have regard to the results of any CFRAM Studies in the assessment of planning 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 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 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.</p> <p>In addition to the County Plan SFRA datasets (including the Flood Zones, CFRAMS mapping, historical and predictive groundwater mapping, predictive pluvial mapping and historical flood risk indicator mapping, such as the Benefitting Lands mapping), new and emerging datasets (such as the OPW's National Fluvial Mapping that will supersede existing PFRA fluvial mapping for catchments greater than 5km²) must be consulted by prospective 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.</p> <p>FL 9 SFRA of Lower Tier Plans Lower tier plans shall undertake SFRA (Strategic Flood Risk Assessment) in compliance with the Flood Risk Management Guidelines.</p> <p>FL 10 SFRA/FRA and Climate Change 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 to this effect.</p> <p>FL 11 FRA 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 the County.</p> <p>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.</p> <p>FL 13 CFRAM It is a policy objective of the Planning Authority to take account of and incorporate into local planning policy and decision making, including possible future variations to this plan, CFRAM measures that may be published in the future, including planned investment measures for managing and reducing flood risk.</p> <p>FL 14 Flood Vulnerable Zones 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, internal layout, flood resilient construction, flood resistant construction, emergency response planning, access and egress during flood events.</p> <p>FL 15 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.</p> <p>FL 16 Benefitting Land Applications for development on land identified as benefiting land may be prone to flooding, and as such site-specific flood risk assessments may be required in these areas.</p> <p>FL 17 Consultation with OPW Consult with the OPW in relation to proposed developments in the vicinity of drainage channels and rivers for which the</p>

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					<p>OPW are responsible and retain a strip on either side of such channels where required, to facilitate maintenance access thereto. In addition, promote the sustainable management and uses of water bodies and avoid culverting or realignment of these features.</p> <p>FL 18 Inappropriate Development on Flood Zones 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 quality and avoid potential effects to ecological features.</p> <ul style="list-style-type: none"> Any development proposals should be considered with caution and will be required to comply with The Planning System and Flood Risk Management Guidelines for Planning Authorities/Circular PL2/2014 & the associated Development Management Justification Test. Climate Change should be duly considered in any development proposal. 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). Any development proposals submitted for this site will require a detailed ecological report (s), carried out by suitably qualified personnel for the purposes of informing Appropriate Assessment Screening by Galway County Council, the competent authority. 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 staff and the public are aware of the special conditions/constraints attached. A briefing will be provided to relevant staff within Galway County Council on the special conditions and constraints on relevant lands.
Material Assets	<ul style="list-style-type: none"> 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-served 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 	<ul style="list-style-type: none"> 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 – 	<ul style="list-style-type: none"> 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/conse 	<p>Also refer to measures under other environmental components including Population and Human Health, Cultural Heritage, Soil, Water, Air, various Land Use and Phasing provisions.</p> <p>Strategic Aims 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. 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.</p> <p>TKT 17 Public Utilities Facilitate the provision and maintenance of essential public utility infrastructure, together with the necessary ancillary facilities and uses, as appropriate. Development proposals in the vicinity of public utilities infrastructure will be assessed on a case-by-case basis in accordance with proper planning and sustainable development.</p> <p>TKT 18 Water Supply, Wastewater and Combined Drainage Infrastructure Support Irish Water in the provision and maintenance adequate wastewater disposal and water supply and the maintenance of existing combined (sewage and surface water) drainage infrastructure, in accordance with EU Directives, to service Tuam. This will include satisfactory capacity for public wastewater and a satisfactory quantity and quality of water supply, Sustainable Drainage</p>	<p>Also refer to measures under other environmental components including Population and Human Health, Cultural Heritage, Soil, Water, Air, various Land Use and Phasing provisions.</p> <p>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).</p> <p>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.</p> <p>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.</p> <p>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 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.</p> <p>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.</p> <p>WS 4 Requirement to Liaise with Irish Water – Water Supply 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.</p> <p>WS 5 Private Water Supply 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.</p> <p>WS 6 Water Framework Directive 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.</p> <p>WS 7 Water Quality 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.</p> <p>WS 8 Proliferation of Septic Tanks Encourage the use of high standard treatment plants to minimise the risk of groundwater pollution.</p> <p>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.</p> <p>CWS 2 Water Mains Rehabilitation</p>

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	energy consumption per capita including promoting energy efficient buildings, retrofitting, smart buildings, cities and grids.	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.	nt-granting framework.	<p>System approaches and techniques within the plan area shall also be supported.</p> <p>TKT 19 Water Supply and Water Conservation Ensure that new developments are adequately serviced with a suitable quantity and quality of drinking water supply, promote water conservation to reduce the overall level of water loss in the public supply and require that new domestic developments provide for water supply metering.</p> <p>TKT 31 Support the implementation of the Local Transport Plan as set out in Section 3 in accordance with proper planning and sustainable development⁹.</p> <p>Additional Mitigation in relation to Policy Objective TKT 31: Ensure that new transport infrastructure, including cycling and walking infrastructure and multi-modal hubs, are subject to the following, as appropriate:</p> <ul style="list-style-type: none"> As outlined in the Galway County Development Plan Policy Objective PRP 2; and Environmental constraints, including those related to habitats and potential impacts, such as disturbance from lighting. This will include minimising river crossings, avoiding sensitive habitats, not increasing barriers to flood waters and sustainable design and construction techniques. <p>To reallocate corresponding road space to walking, cycling and public transport to accompany / occur concurrently with the provision of additional road space capacity.</p> <p>TKT 32 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.</p> <p>TKT 33 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, car clubs, public bike schemes, as appropriate.</p> <p>TKT 34 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</p>	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>WW 3 The Greater Galway Area Strategic Drainage Study 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.</p> <p>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 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."</p> <p>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.</p> <p>WW 6 Private Wastewater Treatment Plants 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).</p> <p>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 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.</p> <p>WW 8 Storm Water Infrastructure 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.</p> <p>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.</p> <p>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.</p> <p>WW11 Protection of Irish Water Collection Systems 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.</p> <p>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.</p> <p>WM 2 Requirements for Waste Management Support and promote the circular economy principles, prioritising prevention, reuse, recycling and 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.</p> <p>WM 3 Waste Recovery and Disposal Facilities Support and facilitate the provision of adequate waste recovery and disposal facilities for the County.</p> <p>WM 4 Waste Legalisation To require that all waste disposal shall be undertaken in compliance with the requirements of the Environmental Protection Agency and relevant Waste Management Legislation.</p>

⁹ 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 for the Draft Plan.

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				From Tuam Draft Local Area Plan: ⁸	From Galway County Development Plan
				<p>Smarter Travel – A Sustainable Transport Future 2009-2020 and the Design Manual for Urban Roads and Streets (2013), as updated in 2019.</p> <p>TKT 35 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.</p> <p>TKT 36 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.</p> <p>TKT 45 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 approach roads into Tuam.</p>	
Air and Climatic Factors	<ul style="list-style-type: none"> 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-served 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 	<ul style="list-style-type: none"> 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 area 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. 	<ul style="list-style-type: none"> 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. 	<p>Strategic Aim 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.</p> <p>TKT 9 Town Centre Management Subject to appropriate resources, the Council in collaboration with stakeholders, shall prepare a town centre management plan for Tuam. The management plan will consider some or all of the following: a) The feasibility of a Town Centre market; b) Upgrade of public lighting and tidying of wirescapes in the Town Centre; c) Connectivity of the Town Centre including upgrading of paving, consideration of feasibility of identified pedestrianised lanes and routes through the Town; d) Scheme for façade improvement on identified priority streetscapes; e) Upgrade and improvement of street furniture; f) A co-ordinated vehicular access arrangement, which shall be in consultation and agreement with the Road Design Section of Galway County Council; g) Consistent sustained signage design policy within the Town Centre; h) Provision of appropriate quality landscaping and functional public spaces; i) Provide footpath and cycling links to the Town Centre; and, j) Car parking management.</p>	<p>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 and Cleaner Air for Europe (CAFÉ) Directive (2008/50/EC) and ensure that all air emissions associated with new developments are within Environmental Quality Standards as set out in the Air Quality Standards Regulations 2011 (SI No. 180 of 2011) (or any updated/superseding documents).</p> <p>AQ 2 Assessment of Air Quality 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.</p> <p>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.</p> <p>AQ 4 Air Purification Galway County Council shall encourage landscaping and deciduous tree planting in an environmentally sensitive manner within towns and villages as a means of air purification, the filtering of suspended particles and the improvement of their micro-climate.</p> <p>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 Regulations (including any updated/superseding Regulations that may be published within the lifetime of this Development Plan).</p> <p>NP 1 Galway County Council Noise Action Plan 2019-2023 To implement the Galway County Council Noise Action Plan 2019-2023 (and any subsequent Plan) in order to avoid, prevent and reduce the harmful effects, including annoyance, due to environmental noise exposure.</p> <p>NP 2 Developments within Noise Maps (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 from environmental noise.</p> <p>NP3 Noise Impact Assessments To require an assessment of impact of the development on noise levels, having regard to the provisions of the Environmental Protection Agency Acts 1992 and 2003 and the EPA Noise Regulations 1994 when assessing planning application.</p> <p>NP 4 Noise Pollution and Regulation Restrict development proposals causing noise pollution in excess of best practice standards and regulate and control activities likely to give rise to excessive noise, other than those activities which are regulated by the EPA</p>

Screening for SEA Report for Proposed Material Alterations

Environmental Component	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non-Significant Effects	Mitigation Measures, including:	
				From Tuam Draft Local Area Plan: ⁸	From Galway County Development Plan
	<p>relating to:</p> <ul style="list-style-type: none"> o Sustainable compact growth; o Sustainable mobility, including walking, cycling and public transport; o Drainage, flood risk management and resilience; o Sectors including agriculture, residential heating and infrastructure; o Sustainable design, energy efficiency and green infrastructure. 			<p>TKT 31 Support the implementation of the Local Transport Plan as set out in Section 3 in accordance with proper planning and sustainable development¹⁰.</p> <p>Additional Mitigation in relation to Policy Objective TKT 31:</p> <p>Ensure that new transport infrastructure, including cycling and walking infrastructure and multi-modal hubs, are subject to the following, as appropriate:</p> <ul style="list-style-type: none"> • As outlined in the Galway County Development Plan Policy Objective PRP 2; and • Environmental constraints, including those related to habitats and potential impacts, such as disturbance from lighting. This will include minimising river crossings, avoiding sensitive habitats, not increasing barriers to flood waters and sustainable design and construction techniques. <p>To reallocate corresponding road space to walking, cycling and public transport to accompany / occur concurrently with the provision of additional road space capacity.</p> <p>TKT 32 Transport Infrastructure</p> <p>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.</p> <p>TKT 33 Sustainable Transportation</p> <p>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, car clubs, public bike schemes, as appropriate.</p> <p>TKT 34 Pedestrian and Cycle Network</p> <p>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.</p> <p>TKT 35 Traffic and Transport Assessment (TTA) and Road Safety Audits</p> <p>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</p>	<p>NP 5 Noise Mitigation Measures</p> <p>Require activities likely to give rise to excessive noise to install noise mitigation measures and monitors. The provision of a noise audit may be required where appropriate.</p> <p>CC 1 Climate Change</p> <p>Support and facilitate the implementation of European, National and Regional objectives for climate adaptation and mitigation taking into account other provisions of the Plan (including those relating to land use planning, energy, sustainable mobility, flood risk management and drainage) and having regard to the Climate mitigation and adaptation measures.</p> <p>CC 2 Transition to a low carbon, climate-resilient society</p> <p>It is a policy objective of the Planning Authority to support the transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050, by way of reducing greenhouse gases, increasing renewable energy, and improving energy efficiency.</p> <p>CC 3 County Galway Climate Adaptation Strategy 2019-2024</p> <p>To implement the County Galway Climate Adaptation Strategy 2019-2024 as appropriate.</p> <p>CC 4 Local Authority Climate Action Plan</p> <p>Support the preparation of a Climate Action Plan for County Galway.</p> <p>CC 5 Climate Adaptation and Mitigation</p> <p>To promote, support and direct effective climate action policies and objectives that seek to improve climate outcomes across County Galway through the encouragement and integration of appropriate mitigation and adaptation considerations and measures into all development and decision-making processes.</p> <p>CC 6 Local Authority Renewable Energy Strategy (LARES)</p> <p>To support the implementation of the Renewable Energy Strategy contained in Appendix 1 of the Galway County Development Plan to facilitate the transition to a low carbon county.</p> <p>CC 7 Climate Action Fund</p> <p>Support the delivery of sustainable development projects under the European Green Deal and utilise the Climate Action Fund/ Just Transition Fund established under the National Development Plan to encourage public and private climate mitigation and adaptation projects in line with criteria set out by the Fund at that time.</p> <p>CC 8 Climate Action and Development Location</p> <p>To implement, through the plan and future local areas plans, policies 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.</p> <p>CC 9 Mainstreaming Climate Change Adaptation</p> <p>Galway County Council shall incorporate climate change adaptation into land use planning, building layouts, energy, transport, natural resource management, forestry, agriculture and marine waters.</p> <p>CC 10 Green Infrastructure</p> <p>Galway County Council shall promote the benefit of open spaces and implement the integration of green infrastructure/networks (e.g., interconnected network of green spaces (including aquatic ecosystems) and other physical features on land) into new development and regeneration proposals in order to mitigate and adapt to climate change.</p>

¹⁰ 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.

Screening for SEA Report for Proposed Material Alterations

Environmental Component	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non-Significant Effects	Mitigation Measures, including:	
				From Tuam Draft Local Area Plan: ⁸	From Galway County Development Plan
				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 39 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.	
Cultural Heritage	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities. 	<ul style="list-style-type: none"> Potential effects on known architectural and archaeological heritage and unknown archaeology however, these will occur in compliance with legislation. 	<p>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.</p> <p>TKT 15 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.</p> <p>TKT 20 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), the National Monuments Act 1930 (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.</p> <p>TKT 23 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 Protection Guidelines 2004/2011 and the published Department of Arts 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 '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</p>	<p>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).</p> <p>AH 2 Protected Structures (Refer 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 architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest, together with the integrity of their character and setting. (b) Review the Record of Protected Structures in order to provide a comprehensive schedule for the protection of structures of special importance in the County during the lifetime 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 detrimental 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.</p> <p>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, in development management functions.</p> <p>AH 4 Architectural Conservation Areas (Refer to Appendix 7) Protect, conserve and enhance the special character of the Architectural Conservation Areas (ACA) included in this plan through the appropriate management and control of the design, location and layout of new development, modifications, alterations or extensions to existing structures, surviving historic plots and street patterns and/or modifications to the character or setting of the Architectural Conservation Area. Works within the ACA shall ensure the conservation of traditional features and building elements that contribute to the character of the area. The special character of an area includes its traditional building stock and material finishes, spaces, streetscape, shop fronts, landscape and setting. New proposals shall have appropriate regard to scale, plot, form, mass, design, materials, colours and function. This will be achieved by; (a) Protecting all buildings, structures, groups of structures, sites, landscapes and all features which contribute to the special character of the ACA from demolition and non-sympathetic alterations. (b) Promote appropriate and sensitive reuse and rehabilitation of buildings and sites within the ACA. (c) Ensure new development within or adjacent to an ACA respects the established character of the area and contributes positively in terms of design, scale, setting and material finishes to the ACA. (d) Promote high quality architectural design within ACAs. (e) Seek the repair and reuse of traditional shopfronts and where appropriate, encourage new shopfronts of a high quality architectural design. (f) Ensure that all new signage, lighting, advertising and utilities to buildings within ACA are designed, constructed, and located in such a manner that they do not detract from the character of the ACA. (g) Protect and enhance the quality of open spaces within ACAs and ensure the protection and where necessary reuse of street furniture and use of appropriate materials during the course of public infrastructure schemes within ACAs. (h) Prohibit development proposals, either in whole or in part for the demolition of a structure within an Architectural Conservation Area that contributes to the special character of the area. (i) Protect structures in ACAs from non-sympathetic alterations and encourage appropriate in-fill developments. (j) Works materially affecting the character of a protected structure or the exterior of a building/ structure within an ACA will require planning permission; (k) Any works carried out to a protected structure or the exterior of a building/structure within an ACA shall be in accordance with best conservation practice and use sustainable and appropriate materials. (l) Ensure that any development, modifications, alterations, or extensions materially affecting the character of a protected structure, or a structure adjoining a protected structure, or a structure within or adjacent to an Architectural Conservation Area (ACA), is sited and designed appropriately and is not detrimental to the character or setting of the protected structure or of the ACA.</p> <p>AH 5 Maintenance and Re-use of existing Building Stock Promote the maintenance and appropriate re-use of the existing stock of buildings with architectural merit as a more sustainable option to their demolition and redevelopment.</p> <p>AH 6 Vernacular Architecture</p>

Screening for SEA Report for Proposed Material Alterations

Environmental Component	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non-Significant Effects	Mitigation Measures, including:	
				From Tuam Draft Local Area Plan: ⁸	From Galway County Development Plan
				<p>are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest, together with the integrity of their character and setting.</p> <p>TKT 25 Architectural Conservation Area Protect, conserve and enhance the essential character of the Tuam Architectural Conservation Area, through respecting the surviving historic plots and street patterns and through the appropriate management and control of the design, location and layout of new development, alterations or extensions to existing structures, and/or modifications to the setting of the structure and the character of the Architectural Conservation Area. The identification of areas of special interest within the Plan boundary may be considered during the lifetime of the Plan.</p>	<p>Recognise the importance of the contribution of vernacular architecture to the character of a place and ensure the protection, retention and appropriate revitalisation and reuse of the vernacular built heritage including structures that contribute to landscape and townscape character and resist the demolition of these structures.</p> <p>AH 7 Local Place Names Protect local place names as an important part of the cultural heritage and unique character of an area. Support the use of appropriate names for new developments that reflect the character and heritage of the area and that contribute to the local distinctiveness of a place.</p> <p>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.</p> <p>AH 9 Local Landscape and Place Assessment 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.</p> <p>AH 10 Designed Landscapes 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 be accompanied by an appraisal of the contributing elements and an impact assessment.</p> <p>AH 11 Custodianship Promote an inter-disciplinary approach demonstrating best practice with regard to the custodianship of protected structures, recorded monuments and elements of built heritage.</p> <p>AH 12 Placemaking for Towns and villages Promote the value of placemaking in cooperation with communities in their towns, villages and local areas.</p> <p>AH 13 Traditional Building Skills Support and promote traditional building skills, training and awareness of the use of appropriate materials and skills within the Local Authority, community groups, owners and occupiers of traditionally built structures.</p> <p>AH 14 Design and Landscaping in New Buildings Encourage new buildings that foster an innovative approach to design and acknowledges the diversity of suitable design solutions in appropriate locations while promoting the added economic, amenity and environmental value of good design.</p> <p>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.</p> <p>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.</p> <p>ARC 3 Archaeological Landscapes To facilitate where possible the identification of important archaeological landscapes in the County</p> <p>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.</p> <p>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.</p> <p>ARC 7 Battlefield Sites Protect the Battle of Aughrim site and other battlefield sites and their settings.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>ARC 11 Industrial and Post Medieval Archaeology Protect and preserve the archaeological value of industrial and post medieval archaeology such as mills, limekilns, bridges,</p>

Screening for SEA Report for Proposed Material Alterations

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				From Tuam Draft Local Area Plan: ⁸	From Galway County Development Plan
					<p>piers, harbours, penal chapels and dwellings. Proposals for refurbishment, works to or redevelopment/conversion of these sites should be subject to careful assessment.</p> <p>ARC 12 Archaeology and Infrastructure Schemes</p> <p>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.</p> <p>CUH 1 Cultural heritage</p> <p>Protect and promote the cultural heritage assets and the intangible cultural heritage assets of County Galway as important social and economic assets.</p> <p>CUH 2 Special Places of Historic Interest</p> <p>To protect and promote where possible special places of historical interest.</p> <p>CUH 3 Placenames/Naming of New Developments</p> <p>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.</p> <p>CUH 4 The Gaeltacht and Linguistic Heritage</p> <p>(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.</p> <p>(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.</p> <p>CUH 5 Library and Archives</p> <p>(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.</p> <p>(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.</p>
Landscape	<ul style="list-style-type: none"> Contributes towards protection of wider landscape and landscape designations by facilitating development within the Plan area. 	<ul style="list-style-type: none"> Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape. 	<ul style="list-style-type: none"> 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. 	<p>Also refer to measures under Biodiversity and Flora and Fauna and Cultural Heritage</p> <p>TKT 21 High Quality, Contextually Sensitive Design</p> <p>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.</p>	<p>Also refer to measures under Biodiversity and Flora and Fauna and Cultural Heritage.</p> <p>Policy Objectives Landscape Conservation and Management</p> <p>LCM 1 Preservation of Landscape Character</p> <p>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.</p> <p>LCM 2 Landscape Sensitivity Classification</p> <p>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.</p> <p>LCM 3 Landscape Sensitivity Ratings</p> <p>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.</p> <p>LCM 4 Open/Unfenced Landscape</p> <p>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.</p> <p>PVSR 1 – Protected Views and Scenic Routes</p> <p>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.</p> <p>TWHS 1 Tentative World Heritage Sites</p> <p>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. Collaborate with landowners, local communities and other relevant stakeholders to achieve World Heritage Site status for the sites identified in County Galway.</p>

2.5 Schedule 2A

PART 1

1. *The characteristics of the plan having regard, in particular, to: the degree to which the plan sets a framework for projects and other activities, either with regard to the location, nature, size and operating conditions or by allocating resources*

The Draft Tuam Local Area Plan 2023-2029 provides a six-year framework for the sustainable development of Tuam, while considering the conservation and protection of the built and natural environment. It sets out an overall strategy for the proper planning and sustainable development of the town in terms of its social, cultural, economic and physical development and consists of a written statement supported by mapping and other appendices. The Material Alterations propose a number of text and map-based changes to the Draft Plan.

Proposed Material Alterations identified on Table 2.4 were determined to require full SEA and these will be considered in the SEA Environmental Report.

Table 2.4 Proposed Material Alterations Requiring SEA¹¹

No.	SEA Screening Consideration Ref. – see Table 2.2 above	No.	SEA Screening Consideration Ref. – see Table 2.2 above
MA9	Ref. 8 – SEA required	MA51	Ref. 8 – SEA required
MA38	Ref. 9 – SEA required	MA55	Ref. 8 – SEA required
MA39	Ref. 8 – SEA required	MA56	Ref. 8 – SEA required
MA49	Ref. 9 – SEA required	MA57	Ref. 9 – SEA required
MA50	Ref. 8 – SEA required		

Taking the above and the examination of the Proposed Material Alterations provided under Sections 2.2 to 2.4 into account, arising from the degree to which the Proposed Material Alterations and the Draft Local Area Plan set a framework for projects and other activities, the other Proposed Material Alterations would not be likely to result in significant environmental effects.

2. *The characteristics of the plan having regard, in particular, to: the degree to which the plan influences other plans, including those in a hierarchy*

The Draft Tuam Local Area Plan 2023-2029 has been guided by the National Planning Framework, the Regional Spatial and Economic Strategy for the Northern and Western Region and the Galway County Development Plan 2022-2028. In turn, the Plan will guide any lower-tier plans and future proposals for land use developments and activities. The Material Alterations are being proposed to the Draft Local Area Plan.

The Proposed Material Alterations identified on Table 2.4 were determined to require full SEA and these will be considered in the SEA Environmental Report.

Taking the above and the examination of the Proposed Material Alterations provided under Sections 2.2 to 2.4 into account, arising from the degree to which the Proposed Material Alterations and the Draft Local Area Plan influence other plans, the other Proposed Material Alterations would not be likely to result in significant environmental effects.

¹¹ For detail on Proposed Material Alterations please refer to Proposed Material Alterations document. For detail on SEA Screening Ref please refer to Table 2.2.

3. *The characteristics of the plan having regard, in particular, to: the relevance of the plan for the integration of environmental considerations in particular with a view to promoting sustainable development*

The Draft Tuam Local Area Plan 2023-2029 - to which the Proposed Material Alterations relate - has undergone SEA. This process integrated environmental considerations into the Plan and found that the Plan contributes to environmental protection and management and sustainable development.

The Proposed Material Alterations identified on Table 2.4 were determined to require full SEA and these will be considered in the SEA Environmental Report.

Taking the above and the examination of the Proposed Material Alterations provided under Sections 2.2 to 2.4 into account, arising from the degree to which the Proposed Material Alterations and the Draft Local Area Plan are relevant for the integration of environmental considerations with a view to promoting sustainable development, the other Proposed Material Alterations would not be likely to result in significant environmental effects.

4. *The characteristics of the plan having regard, in particular, to: environmental problems relevant to the plan*

Environmental problems arise where there is a conflict between current environmental conditions and legislative targets. Through its provisions relating to environmental protection and management, the Draft Tuam Local Area Plan 2023-2029 contributes towards ensuring that environmental conditions do not get worse and, where possible, they contribute towards its amelioration.

The Proposed Material Alterations identified on Table 2.4 were determined to require full SEA and these will be considered in the SEA Environmental Report.

Taking the above and the examination of the Proposed Material Alterations provided under Sections 2.2 to 2.4 into account, arising from environmental problems relevant to the Proposed Material Alterations and the Draft Local Area Plan, the other Proposed Material Alterations would not be likely to result in significant environmental effects.

5. *The characteristics of the plan having regard, in particular, to: the relevance of the plan for the implementation of European Union legislation on the environment (e.g. plans linked to waste-management or water protection)*

The Draft Tuam Local Area Plan 2023-2029 relates to the land use and town planning sector and has fulfilled requirements in relation to SEA. This process integrated considerations with regard to EU and national legislation on the environment, including those relating to the waste management and the Water Framework Directive.

The Proposed Material Alterations identified on Table 2.4 were determined to require full SEA and these will be considered in the SEA Environmental Report.

Taking the above and the examination of the Proposed Material Alterations provided under Sections 2.2 to 2.4 into account, arising from the relevance of the Proposed Material Alterations and the Draft Local Area Plan for the implementation of European Union legislation on the environment, the other Proposed Material Alterations would not be likely to result in significant environmental effects.

PART 2

1. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the probability, duration, frequency and reversibility of the effects

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

2. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the cumulative nature of the effects

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

3. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the transboundary nature of the effects

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

4. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the risks to human health or the environment (e.g. due to accidents)

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

5. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the magnitude and spatial extent of the effects (geographical area and size of the population likely to be affected)

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

6. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the value and vulnerability of the area likely to be affected due to:

a) special natural characteristics or cultural heritage;

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

b) exceeded environmental quality standards or limit values, and;

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

c) intensive land-use.

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

7. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the effects on areas or landscapes which have a recognised national, European Union or international protection status

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

Section 3 Conclusion

Most Proposed Material Alterations are advised not to result in likely significant effects. Taking into account the measures that have been already integrated into the Draft Plan and the existing Galway County Development Plan 2022-2028 that provide for and contribute towards environmental protection, environmental management and sustainable development, it is identified that all potential effects arising from most Proposed Alterations: either are present already (beneficial) and will be further contributed towards; or will be mitigated so as not to be significant (adverse). In addition, some alterations merely added clarifications or amended context setting text for Plan provisions and these will not result in significant environmental effects. Consequently, these Proposed Material Alterations do not require SEA.

The Proposed Material Alterations identified on Table 2.4 are advised as requiring SEA and consideration in an SEA Environmental Report.

An SEA Statement will be prepared following adoption of the Plan, which will detail how environmental considerations were integrated into the Plan and how consultations on the SEA and associated Plan-preparation process were considered. The Appropriate Assessment Natura Impact Report will be finalised in a similar manner at adoption, taking into account how environmental considerations were integrated into the Plan and how consultations were considered.

Appendix A SFRA Addendum

STRATEGIC FLOOD RISK ASSESSMENT

ADDENDUM

AMENDED FOLLOWING PUBLIC DISPLAY OF THE DRAFT PLAN AND ASSOCIATED DOCUMENTS

TEXT TO BE ADDED IS IN RED: LIKE THIS
TEXT TO BE DELETED IS IN RED STRIKETHROUGH: ~~LIKE THIS~~

FOR THE

DRAFT TUAM LOCAL AREA PLAN 2023-2029

for: **Galway County Council**

Áras an Chontae
Prospect Hill
Galway



Comhairle Chontae na Gaillimhe
Galway County Council

by: **CAAS Ltd.**

1st Floor
24-26 Ormond Quay Upper
Dublin 7



FEBRUARY-JUNE 2023

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Appendix I

Summary of the requirements of the Flood Guidelines for land uses in Flood Zones

Appendix II

Selection of Flood Risk Indicator Mapping and Flood Zone Mapping

Section 1 Introduction and Policy Background

1.1 Introduction

Galway County Council has prepared a new Draft 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.

This Strategic Flood Risk Assessment (SFRA) document has been prepared alongside the LAP taking into account *The Planning System and Flood Risk Management - Guidelines for Planning Authorities* (Department of the Environment, Heritage and Local Government and Office of Public Works, 2009) and Department of the Environment, Community and Local Government Circular PL 2/2014.

1.2 The Draft Local Area Plan

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

The LAP should be read in conjunction with the 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 relevant County Development Plan shall take precedence.

The general development management standards, zoning matrix/descriptions and policies and objectives in the County Development Plan (including provisions relating to flood risk management and drainage) can be applied to the Plan area, while additional policies and objectives that are specific to Tuam are included in the LAP.

In addition, land use zoning contained within the Draft Plan has been informed by the SFRA process and associated delineation of flood risk zones. The detailed Plan preparation process undertaken by the Planning Department combined with specialist input from the SFRA process facilitated zoning that helps to avoid inappropriate development being permitted in areas of high flood risk.

1.3 Flood Risk and its Relevance as an Issue to the Plan

1.3.1 Flood Risk

Flooding is an environmental phenomenon and can pose a risk to human health as well as causing economic and social effects. Some of the effects of flooding are identified on Table 1.

Certain lands within the Plan area have the potential to be vulnerable to flooding and this vulnerability could be exacerbated by changes in both the occurrence of severe rainfall events and associated flooding. Local conditions such as low-lying lands and slow surface water drainage can increase the risk of flooding.

Table 1 Potential effects that may occur as a result of flooding

Tangible Effects	Intangible Human and Other Effects
Damage to buildings (houses)	Loss of life
Damage to contents of buildings	Physical injury
Damage to new infrastructure e.g. roads	Increased stress
Loss of income	Physical and psychological trauma
Disruption of flow of employees to work causing knock on effects	Increase in flood related suicide
Enhanced rate of property deterioration and decay	Increase in ill health
Long term rot and damp	Homelessness
	Loss of uninsured possessions

1.4 Flood Risk Management Policy

1.4.1 EU Floods Directive

The European Directive 2007/60/EC on the assessment and management of flood risk aims to reduce and manage the risks that floods pose to human health, the environment, cultural heritage and economic activity. The Directive applies to inland waters as well as all coastal waters across the whole territory of the EU. The Directive requires Member States to:

- Carry out a preliminary assessment by 2011 in order to identify the river basins and associated coastal areas where potential significant flood risk exists (preliminary mapping was prepared and a list of Areas for Further Assessment finalised in 2012).
- Prepare flood extent maps for the identified areas (finalised in 2016 for inclusion in Flood Risk Management Plans – see below).
- Prepare flood risk management plans focused on prevention, protection and preparedness. These plans are to include measures to reduce the probability of flooding and its potential consequences. These Plans were adopted in 2018.

Implementation of the EU Floods Directive is required to be coordinated with the requirements of the EU Water Framework Directive and the current National River Basin Management Plan.

1.4.2 National Flood Policy

Historically, flood risk management focused on land drainage for the benefit of agricultural improvement. With increasing urbanisation, the Arterial Drainage Act, 1945, was amended in 1995 to permit the Office of Public Works (OPW) to implement localised flood relief schemes to provide flood protection for cities, towns and villages.

In line with changing national and international paradigms on how to manage flood risk most effectively and efficiently, a review of national flood policy was undertaken in 2003-2004. The review was undertaken by an Inter-Departmental Review Group, led by the Minister of State at the Department of Finance with special responsibility for the OPW. The Review Group prepared a report that was put to Government, and subsequently approved and published in September 2004 (Report of the Flood Policy Review Group, OPW, 2004).

The scope of the review included a review of the roles and responsibilities of the different bodies with responsibilities for managing flood risk, and to set a new policy for flood risk management in Ireland into the future. The adopted policy was accompanied by many specific recommendations, including:

- Focus on managing flood risk, rather than relying only flood protection measures aimed at reducing flooding;

- Taking a catchment-based approach to assess and manage risks within the whole-catchment context; and
- Being proactive in assessing and managing flood risks, including the preparation of flood maps and flood risk management plans.

1.4.3 National CFRAM Programme

The national Catchment Flood Risk Assessment and Management (CFRAM) programme commenced in Ireland in 2011. The CFRAM Programme is intended to deliver on core components of the National Flood Policy, adopted in 2004, and on the requirements of the EU Floods Directive. The Programme has been implemented through CFRAM studies that have been undertaken for each of the river basin districts in Ireland.

The CFRAM Programme comprises three phases as follows:

- The Preliminary Flood Risk Assessment¹ (PFRA) mapping exercise, which was completed in 2012;
- The CFRAM Studies and parallel activities, with Flood Risk Management Plans finalised in 2018; and
- Implementation and Review.

The Programme provides for three main consultative stages as follows:

- Consultation for the PFRA mapping that was adopted in 2012;
- Consultation for Flood Extent mapping, that was finalised in 2016 for inclusion in Flood Risk Management Plans; and
- Consultation for Flood Risk Management Plans, that were adopted in 2018.

The OPW is the lead agency for flood risk management in Ireland. The coordination and implementation of Government policy on the management of flood risk in Ireland is part of its responsibility. The European Communities (Assessment and Management of Flood Risks) Regulations 2010 (S.I. No. 122) identifies the Commissioners of Public Works as the 'competent authority' with overall responsibility for implementation of the Floods Directive 2007/60/EC. The OPW is the principal agency involved in the preparation of CFRAM Studies.

1.4.4 Flood Risk Management Guidelines

1.4.4.1 Introduction

In 2009, the OPW and the then Department of the Environment and Local Government (DEHLG) published Guidelines on flood risk management for planning authorities entitled *The Planning System and Flood Risk Management - Guidelines for Planning Authorities*. The Guidelines introduce mechanisms for the incorporation of flood risk identification, assessment and management into the planning process. Implementation of the Guidelines is intended to be achieved through actions at the national, regional, local authority and site-specific levels. Planning authorities and An Bord Pleanála are required to have regard to the Guidelines in carrying out their functions under the Planning Acts.

The core objectives of the Guidelines are to:

- Avoid inappropriate development in areas at risk of flooding;
- Avoid new developments increasing flood risk elsewhere, including that which may arise from surface water run-off;
- Ensure effective management of residual risks for development permitted in floodplains;
- Avoid unnecessary restriction of national, regional or local economic and social growth;
- Improve the understanding of flood risk among relevant stakeholders; and

¹ The PFRAs identified areas at risk of significant flooding and includes maps showing areas deemed to be at risk. The areas deemed to be most significant risk, where the flood risk that is of particular concern nationally, are identified as Areas for Further Assessment (AFAs). Tuam was identified as an AFA. The OPW has undertaken a detailed assessment on the extent and degree of fluvial flood risk for various areas in County Galway, including these AFAs, producing Flood Extent Mapping.

- Ensure that the requirements of EU and national law in relation to the natural environment and nature conservation are complied with at all stages of flood risk management.

1.4.4.2 Principles of Flood Risk Management

The key principles of flood risk management set out in the flood Guidelines are to:

- Avoid development that will be at risk of flooding or that will increase the flooding risk elsewhere, where possible;
- Substitute less vulnerable uses, where avoidance is not possible; and
- Mitigate and manage the risk, where avoidance and substitution are not possible.

The Guidelines follow the principle that development should not be permitted in flood risk areas, particularly floodplains, except where there are no alternative and appropriate sites available in lower risk areas that are consistent with the objectives of proper planning and sustainable development.

Development in areas that have the highest flood risk should be avoided and/or only considered in exceptional circumstances (through a prescribed *Justification Test*) if adequate land or sites are not available in areas that have lower flood risk. Most types of development would be considered inappropriate in areas that have the highest flood risk. Only water-compatible development such as docks and marinas, dockside activities that require a waterside location, amenity open space, outdoor sports and recreation and essential transport infrastructure that cannot be located elsewhere would be considered appropriate in these areas.

1.4.4.3 Stages of SFRA

The Flood Risk Management Guidelines recommend a staged approach to flood risk assessment that covers both the likelihood of flooding and the potential consequences. The stages of appraisal and assessment are:

Stage 1 Flood risk identification – to identify whether there may be any flooding or surface water management issues related to either the area of Regional Spatial and Economic Strategies, Development Plans and LAP's or a proposed development site that may warrant further investigation at the appropriate lower level plan or planning application levels.

Stage 2 Initial flood risk assessment – to confirm sources of flooding that may affect a Plan area or proposed development site, to appraise the adequacy of existing information and to scope the extent of the risk of flooding which may involve preparing flood zone maps. Where hydraulic models exist the potential impact of a development on flooding elsewhere and of the scope of possible mitigation measures can be assessed. In addition, the requirements of the detailed assessment are scoped.

Stage 3 Detailed flood risk assessment – to assess flood risk issues in sufficient detail and to provide a quantitative appraisal of potential flood risk to a proposed or existing development or land to be zoned, of its potential impact on flood risk elsewhere and of the effectiveness of any proposed mitigation measures.

1.4.4.4 Flood Zones

Flood risk is an expression of the combination of the flood probability or likelihood and the magnitude of the potential consequences of the flood event. It is normally expressed in terms of the following relationship:

$$\text{Flood risk} = \text{Likelihood of flooding} \times \text{Consequences of flooding}$$

Likelihood of flooding is normally defined as the percentage probability of a flood of a given magnitude or severity occurring or being exceeded in any given year. For example, a 1% Annual Exceedance Probability (AEP) indicates the severity of a flood that is expected to be exceeded on average once in 100 years, i.e. it has a 1 in 100 (1%) chance of occurring in any one year.

Consequences of flooding depend on the hazards associated with the flooding (e.g. depth of water, speed of flow, rate of onset, duration, wave-action effects, water quality) and the vulnerability of people, property and the environment potentially affected by a flood (e.g. the age profile of the population, the type of development and the presence and reliability of mitigation measures).

Flood zones are geographical areas within which the likelihood of flooding is in a particular range and they are a key tool in flood risk management within the planning process as well as in flood warning and emergency planning.

There are three types of flood zones defined for the purposes of the Flood Guidelines:

- **Flood Zone A** – where the probability of flooding from rivers and the sea is highest (greater than 1% or 1 in 100 for river flooding or 0.5% or 1 in 200 for coastal flooding²);
- **Flood Zone B** – where the probability of flooding from rivers and the sea is moderate (between 0.1% or 1 in 1000 and 1% or 1 in 100 for river flooding and between 0.1% or 1 in 1000 year and 0.5% or 1 in 200 for coastal flooding); and
- **Flood Zone C** – where the probability of flooding from rivers and the sea is low (less than 0.1% or 1 in 1000 for both river and coastal flooding). Flood Zone C covers all other areas that are not in zones A or B.

A summary of the requirements of the Flood Guidelines for land uses across each of the above flood zones is provided at Appendix I.

1.5 Emerging Information and Disclaimer

It is important to note that compliance with the requirements of the Flood Risk Management Guidelines is currently based on emerging and best available data at the time of preparing the assessment, including Flood Risk Management Plans, which will be updated on a cyclical basis as part of CFRAM activities. The SFRA process for the Draft Plan is ongoing and will be updated as relevant, including to take account of any submissions made and any Material Alterations that arise during the Plan-preparation process.

Following adoption of the Plan, information in relation to flood risk may be altered in light of future data and analysis, by, for example, the OPW, or future flood events. As a result, all landowners and developers are advised that Galway County Council and their agents can accept no responsibility for losses or damages arising due to assessments of the vulnerability to flooding of lands, uses and developments. Owners, users and developers are advised to take all reasonable measures to assess the vulnerability to flooding of lands and buildings (including basements) in which they have an interest prior to making planning or development decisions.

Any future SFRAs for the Plan area or for the County will integrate other new and emerging data.

² Coastal flooding is not relevant to the LAP

Section 2 Stage 1 SFRA - Flood Risk Identification

2.1 Introduction

Stage 1 SFRA (flood risk identification) has been undertaken in order to identify whether there may be any flooding or surface water management issues within or adjacent to zoned lands and consequently whether Stage 2 SFRA (flood risk assessment) should be proceeded to. It is reproduced in part this document.

Tuam is located within the Corrib River Basin for which the Flood Risk Management Plan for the Corrib River Basin (UOM30). Stage 1 SFRA is based on existing information on flood risk indicators based on historical evidence and computational models. A selection of key indicators is mapped for Tuam in Appendix II.

2.2 Drainage, Defences and Early Warning Systems

With regard to areas benefitting from drainage and defences (flood relief scheme works), there are various measures that have been implemented in County Galway that will contribute towards flood risk management. These include the culverting of various streams and rivers in many urban areas and embankments.

Arterial Drainage Schemes were carried out by the Office of Public Works under the Arterial Drainage Act 1945 to improve land for agricultural purposes and to mitigate flooding. Arterial drainage maintenance and monitoring of these schemes is still carried out by OPW on rivers, lakes, weirs, bridges and embankments to maintain adequate conveyance and ensure that flood waters (of varying magnitude but typically the 3-year flood) are retained in bank by lowering water levels during the growing season thus reducing waterlogging on the adjacent land during wetter periods. Various channels within the Tuam LAP area benefit from the Arterial Drainage Schemes (see Appendix II mapping).

The 2018 Flood Risk Management Plan (FRMP) for the Corrib River Basin (UOM30) identifies various general measures applicable to the catchment under "Measures Applicable for all Areas"³. The Plan identifies the following measures for the Corrib catchment in particular: Maintenance of Arterial Drainage Schemes; and Maintenance of Drainage Districts.

The provision of flood protection measures can significantly reduce flood risk. However, the Ministerial Guidelines require that the presence of flood protection structures should be ignored in determining flood zones. This is because of risks relating to failure and severe flood events that exceed design capacity (the risk of severe events is exacerbated with climate change). Notwithstanding this, new development can proceed in areas that are at elevated levels of flood risk subject to the Justification Test provided for by the Guidelines being passed, which takes into account proposals to manage flood risk, such as the development of defences. Although insurance can be challenging to attain in these instances.

³ Under the headings of:

- Prevention: Sustainable Planning and Development Management
- Prevention: Sustainable Urban Drainage Systems
- Prevention: Voluntary Home Relocation
- Prevention: Adaptation Planning
- Prevention: Land Use Management and Natural Flood Risk Management Measures
- Protection: Maintenance of Channels Not Part of a Scheme
- Preparedness: Promotion of Individual and Community Resilience
- Preparedness: Flood Forecasting and Warning
- Preparedness: Emergency Response Planning
- Preparedness: Individual Property Protection
- Preparedness: Flood-Related Data Collection

As provided for under Plan Objective FRM 07 from the County Development Plan, it is Council policy to "Protect waterbodies and watercourses within the County from inappropriate development, including rivers, streams, associated undeveloped riparian strips, wetlands and natural floodplains. This will include protection buffers in riverine, wetland and coastal areas as appropriate". Such protection will, in combination with the direction of development within the existing footprints of settlements, safeguard flood plains from development throughout the County.

Various rivers and their banks and culverts in the area are maintained by the Office of Public Works and Galway County Council. New developments should ensure that access is preserved for the maintenance of Arterial Drainage Districts and the OPW will be consulted with in the consideration of applications for developments in the vicinity of the Drainage District in this regard. Applications for development on land identified as benefiting land may be prone to flooding, and as such site-specific flood risk assessments may be required in these areas.

Met Éireann currently issues flood warnings for County Galway. Met Éireann, in collaboration with the OPW, is currently engaged in the establishment of a National Flood Forecasting and Warnings Service to forecast for fluvial and coastal flood events.

2.3 Other Flood Studies

Other Flood Studies considered in the preparation of this assessment include:

- Flood Risk Management Plan (Corrib River Basin), 2018;
- Previous SFRA in County Galway; and
- Regional Flood Risk Assessment for the Northern and Western Regional Spatial and Economic Strategy, 2020.

2.4 Flood Risk Indicators

Indicators of flood risk that are based on historical flooding events are identified and described on Table 2. Indicators of flood risk that are based on computational models – predictive flood risk indicators – are identified and described on Table 3. A selection of the historical and predictive flood risk indicators that were considered by the SFRA are mapped at settlement level for Tuam in Appendix II.

Table 2 Historical Flood Risk Indicators

Information Source	Description	Strategic Limitations
Recorded Flood Events from the OPW	A flood event is the occurrence of recorded flooding at a given location on a given date. The flood event is derived from different types of information (reports, photographs etc.).	This dataset only provides a spot location
Recurring Flood Events	A flood event that has occurred more than once at a certain area is named a recurring flood event.	This dataset only provides a spot location
OPW Flood Extent	A flood extent is an inundated area as recorded at a certain moment in time. This layer of information includes floods recorded in 1999/2000 and 1954.	Coverage limited
Alluvium Soils	Mineral alluvial soil mapping is indicative of recurrent or significant fluvial flooding at some point in the past and was generated by Teagasc with co-operation of the Forest Service, EPA and GSI. This project was completed May 2006.	Drainage may have changed significantly since these soils were deposited.
Benefitting lands (OPW)	Benefitting lands mapping is a dataset identifying land that might benefit from the implementation of Arterial (Major) Drainage Schemes (under the Arterial Drainage Act 1945) and indicating areas of land estimated or reported to be subject to flooding or poor drainage.	Identifies broad areas - low resolution for flood risk management
Drainage Districts (OPW)	This drainage scheme mapping dataset was prepared on behalf of the Drainage Districts (Local Authorities with statutory responsibility for maintenance under the Arterial Drainage Act, 1925). These maps identify land that might benefit from the implementation of Arterial (Major) Drainage Schemes and indicate areas of land subject to flooding or poor drainage.	Identifies large broad areas - very low resolution for flood risk management

Information Source	Description	Strategic Limitations
Land Commission (OPW)	This dataset indicates areas of land defended to some degree against flooding that were formerly the responsibility of the Land Commission.	Identifies broad areas - low resolution for flood risk management
Geological Survey of Ireland (GSI) Flood Event	Probabilistic and historic groundwater flood maps available on the GSI's Groundwater Flooding Data Viewer have been prepared by Geological Survey Ireland through the 2016-2019 GW Flood Project. The Groundwater Flood Probability Maps show the probabilistic flood extent of groundwater flooding in limestone regions and are focused primarily (but not entirely) on flooding at seasonally flooded wetlands known as turloughs. The Historic Groundwater Flood Map shows the observed peak flood extents caused by groundwater in Ireland and are largely based on the winter 2015 / 2016 flood event which was the largest flood on record in many areas.	This 2015-2016 data shows surface water flooding and does not distinguish between fluvial and pluvial flooding. There is no GSI Flood Event mapping available within the Plan area, although it indicates areas of potential surface water risk beyond the Plan area.

Table 3 Predictive Flood Risk Indicators

Information Source	Description	Strategic Limitations
CFRAM Study, Flood Extent Mapping, 2016	Following the undertaking of the PFRA, the OPW, through its engineering consultants and working with local authorities and other stakeholders, conducted extensive engineering assessments to better understand and detail the actual risk from flooding for areas that were at highest levels of risk. This was the subject of public consultation. The outcome of that work includes Predicted Flood Extent maps that were finalised in 2016. For fluvial flood levels, calibration and verification of the models make use of the best available data including hydrometric records, photographs, videos, press articles and anecdotal information.	Spatial spread is limited, including to the areas that are considered to be at most risk of flooding.
National Indicative Fluvial Mapping (NIFM) 2021	The PFRA indicative flood maps have now been superseded by the recently published NIFM. The OPW NIFM project has produced second generation indicative fluvial flood spatial data that are of a higher quality and accuracy to those produced for the first cycle PFRA. This project has covered 27,000 km of river reaches, separated into 37 drainage areas, consisting of 509 sub-catchments.	Does not cover smaller sized catchments. There is no NIFM available within the Plan area, although it indicates areas of potential risk beyond the Plan area.
GSI Predictive groundwater flood map	The predictive groundwater flood map presents the probabilistic flood extents for locations of recurrent karst groundwater flooding. It consists of a series of stacked polygons at each site representing the flood extent for specific AEP's mapping floods that are expected to occur every 10, 100 and 1000 years (AEP of 0.1, 0.01, and 0.001 respectively). The map is focussed primarily (but not entirely) on flooding at seasonally inundated wetlands known as turloughs. Sites were chosen for inclusion in the predictive map based on existing turlough databases as well as manual interpretation of SAR imagery. The mapping process tied together the observed and SAR-derived hydrograph data, hydrological modelling, stochastic weather generation and extreme value analysis to generate predictive groundwater flood maps for over 400 qualifying sites.	Not all turloughs are included in the predictive map as some sites could not be successfully monitored with SAR and/or modelled.

Information Source	Description	Strategic Limitations
<p>OPW Preliminary Flood Risk Assessment (PFRA) Fluvial, Groundwater and Pluvial flood maps, 2012</p>	<p>The OPW PFRA mapping dataset has been arrived at by:</p> <ul style="list-style-type: none"> • Reviewing records of floods that have happened in the past; • Undertaking analysis to determine which areas might flood in the future, and what the impacts might be; and • Extensive consultation with each local authorities and other Government departments and agencies. <p>This assessment has considered all types of flooding, including that which can occur from rivers, the sea and estuaries, heavy rain, groundwater, the failure of infrastructure, and so on. It has also considered the impacts flooding can have on people, property, businesses, the environment and cultural assets. Further information on the purpose and development of the OPW PFRA Maps are available on www.cfram.ie.</p>	<p>The PFRA is only a preliminary assessment, based on available or readily derivable information. Analysis has been undertaken to identify areas prone to flooding, and the risks associated with such flooding, but this analysis is purely indicative and undertaken for the purpose of completing the PFRA. The mapping has been developed using simple and cost-effective methods and is based on broad-scale simple analysis and may not be accurate for a specific location/use.</p> <p>Pluvial flood risk is likely to be present in local areas, however; it is not taken into account in the delineation of flood zones. Furthermore, PFRA indicative pluvial maps (2012) are not considered to be reliable for the purposes of zoning or decision-making.</p>

2.5 Conclusion

The information detailed above indicates elevated levels of flood risk in various locations across the town; therefore, a Stage 2 SFRA was proceeded to.

Section 3 Stage 2 SFRA - Flood Risk Assessment

3.1 Introduction

Stage 2 SFRA (flood risk assessment) has been undertaken in order to:

- Confirm the sources of flooding that may affect zoned and adjacent areas;
- Appraise the adequacy of existing information as identified by the Stage 1 SFRA; and
- Scope the extent of the risk of flooding through the preparation of flood zone maps.

3.2 Findings and Adequacy of Existing Information and Delineation of Flood Zones

Desk and in-field studies were undertaken taking into account the following factors:

- OPW's CFRAMS fluvial flood extent mapping (2016) and other predictive indicators;
- Historical indicators of flood risk;
- Documented Council knowledge of lands;
- The potential source and direction of flood paths from rivers and streams;
- Vegetation indicative of flood risk; and
- The locations of topographic/built features that coincide with the flood indicator related boundaries/topographical survey.

Within the annual exceedance probabilities specified by the Flood Guidelines for Flood Zones A and B, there are elevated levels of flood risk at certain areas in Tuam, as shown in Appendix II.

3.3 Flood Risk Zone Mapping

Flood Risk Zone maps have been produced taking into account the findings of the Stage 1 and Stage 2 SFRA desk and in field studies as identified above⁴.

The Flood Risk Zone map for Tuam is provided in Appendix II and identifies Flood Zone A (darker blue) and Flood Zone B⁵ (lighter blue). All other areas fall within Flood Zone C. As per the Guidelines, the flood zones are as follows:

- Flood Zone A – where the probability of flooding from rivers is highest (greater than 1% or 1 in 100 for river flooding);
- Flood Zone B – where the probability of flooding from rivers is moderate (between 0.1% or 1 in 1000 and 1% or 1 in 100 for river flooding); and
- Flood Zone C – where the probability of flooding from rivers is low (less than 0.1% or 1 in 1000 for river flooding).

⁴ Including taking into account predictive and historical indicators of flood risk, documented Council knowledge of lands, Council Engineer review and input into indicators and flood zones (local knowledge), the potential source and direction of flood paths from rivers and streams, vegetation indicative of flood risk and the locations of topographic/built features that coincide with the flood indicator related boundaries/topographical survey.

⁵ As identified by the Guidelines, in rivers with a well-defined floodplain or where the coastal plain is well defined at its rear, the limits of Zones A and B will virtually coincide. Zone B will only be significantly different in spatial extent from Zone A where there is extensive land with a gentle gradient away from the river or the sea.

3.4 Sensitivity to Climate Change

'The Planning System and Flood Risk Management Guidelines for Planning Authorities and Technical Appendices, 2009' recommends that a precautionary approach to climate change is adopted due to the level of uncertainty involved in the potential effects. In this regard, the Guidelines recommends:

- Recognising that significant changes in the flood extent may result from an increase in rainfall or tide events and accordingly adopting a cautious approach to zoning land in these potential transitional areas;
- Ensuring that the levels of structures designed to protect against flooding such as flood defences⁶, land raising or raised floor levels are sufficient to cope with the effects of climate change over the lifetime of the development they are designed to protect (normally 85-100 years); and
- Ensuring that structures to protect against flooding and the development protected are capable of adaptation to the effects of climate change when there is more certainty about the effects and still time for such adaptation to be effective.

~~Advice on the expected impacts of climate change and the allowances to be provided for future flood risk management in Ireland is given in the OPW Draft Guidance on Assessment of Potential Future Scenarios for Flood Risk Management (2009). Two climate change scenarios are considered. These are the Mid-Range Future Scenario (MRFS) and the High-End Future Scenario (HEFS). The MRFS is intended to represent a "likely" future scenario based on the wide range of future predictions available. The HEFS represents a more "extreme" future scenario at the upper boundaries of future projections. Based on these two scenarios the OPW recommended allowances for climate change in relation to river flows and sea levels are given in Table 4. These climate change allowances are particularly important at the development management stage of planning, and will ensure that proposed development is designed and constructed to take into account best current knowledge. Climate change allowances have been integrated into the recommendations provided at Section 4 of this report and MRFS and HEFS mapping is available from the OPW for certain areas, including AFAs.~~

~~**Table 4 Allowances for Future Scenarios (100-Year Time Horizon)⁷**~~

Criteria	MRFS – to be considered for most development scenarios	HEFS – to be considered in relation to high value, high vulnerability development which cannot be relocated
Extreme Rainfall Depths	+20%	+30%
Flood Flows	+20%	+30%
Mean Sea Level Rise	+500mm	+1000mm

The CFRAM Programme include maps for two potential future scenarios taking account of different degrees of climate impact, the Mid-Range Future Scenario (more likely to occur over the coming decades) and the High-Range Future Scenario (less likely to occur over the coming decades). A selection of Future Scenario Mapping is provided under Appendix II of this SFRA report. In compliance with the Guidelines, the Flood Zones identified by the SFRA are defined on the basis of current flood risk. The CFRAMS potential future scenarios mapping and the potential impacts of climate change, including increased rainfall intensities and increased fluvial flood flows, are required to be further taken into account at lower tiers of decision making concerning individual projects.

Flood Risk Assessments shall apply the precautionary approach recommended in the Guidelines and shall be informed by the advice on the expected impacts of climate change and the allowances to be provided for future flood risk management provided in the OPW's (2019) Flood Risk Management Climate Change Sectoral Adaptation Plan [and the guidance on potential future scenarios contained therein.](#)

⁶ Defended areas are highly sensitive to climate change as the likelihood of defence failure and resulting flooding increases.

⁷ OPW Draft Guidance on Assessment of Potential Future Scenarios for Flood Risk Management (2009)

3.5 Sustainable Drainage Systems and Surface Water Guidance and Strategy

As provided for by measures integrated into both the existing, already in force, Galway County Development Plan and the Draft Local Area Plan (including the measures reproduced at Section 4 of this report), new developments will be required to incorporate the requirement for Sustainable Urban Drainage Systems (SuDS) where appropriate. In combination, these provisions contribute towards a sustainable drainage strategy for the Plan area.

It is likely that some or all of the following SuDS techniques will be applicable to key development sites⁸ within Tuam, including to manage surface water run-off:

- Rainwater harvesting
- Green roofs
- Infiltration systems
- Proprietary treatment systems
- Filter strips
- Filter drains
- Swales
- Bioretention systems
- Trees
- Pervious pavements
- Attenuation storage tanks
- Detention basins
- Ponds and wetlands

Each land use zoning objective, including those for opportunity sites, allows for a range of possible uses and the Local Area Plan, and associated County Development Plan, allow for a range of scales, heights, densities configurations/layouts and designs. The application of different SuDS techniques will be dependent on a combination of the site's characteristics and the development (when known) being considered.

Because of the infinite range of land use types and associated developments and designs that could occur on sites within the Plan area under this type of Plan⁹, the guidance from this SFRA is to consider the full range of SUDs available, taking into account the recommendations and information provided above and below. On key development/opportunity sites, in particular, integrated and area-based provision of SuDS and green infrastructure may be appropriate in order to avoid reliance on individual site by site solutions.

Some sites, such as those for which guidance is provided for below, will pose particular challenges for SuDS. The best practice manuals cited at the end of this sub-section should be considered in determining solutions at these and other development sites.

At sites with high groundwater levels:

- Infiltration techniques may be particularly challenging and shallow infiltration basins or permeable pavements, may be most appropriate.
- Storage and conveyance systems need to be kept above maximum groundwater levels and membranes of appropriate robustness should be used to line any tanks
- Locating storage tanks or lined sub-base systems below the maximum likely groundwater level can cause result in flotation and structural risks

At sites that are steeply sloping:

- Effective utilisation of SuDS storage capacity should be considered, which can benefit from aligning with contours of roads and other structures, where these sites are terraced. Terraced

⁸ Including: Opportunity Site 1–Corner of The Mall & Stable Lane, Opportunity Site 2–Corner of Chapel Lane & Egan's Lane, Opportunity Site 3–Corner of Barracks Street & Liam Mellows Street and Opportunity Site 4 –Bishop Street.

⁹ Refer to Plan "Table 1.6.1 Land Use Matrix Table", for example, for the wide range of land uses possible at sites zoned with single land use zoning objectives.

car-parking areas can allow for storage of water through pervious pavements. Basins on terraces can provide open space. The runoff catchment on these sites can also be divided into smaller sub catchments.

- Velocities in swales and basins due to the steep slope can be managed by using check dams in swales or in storage layers, such as below permeable pavements.
- The possibility of infiltrating water resurfacing downslope or to increase pressure on downslope structures, such as walls, causing them to fail should be considered.

At sites that are very flat:

- On very flat sites, it is often not possible to construct piped drainage systems with sufficient falls to achieve minimum self-cleansing velocities. The solution can involve the use of shallow SuDS components such as swales, pervious pavements or high-capacity linear drainage channels, often dividing the site into small sub-catchments and providing local combined storage and conveyance components.
- A slight fall on any subgrade exposed to water is preferred in order to avoid ponding of water and reduction in strength in the soil due to waterlogging. If this is not possible then reduction in strength should be taken into account in the structural design of tanks or pervious pavements.
- Pumping should be a last resort and only allowable in situations where guaranteed maintenance of the pumps can be ensured.

At sites that include areas of floodplain:

- Notwithstanding that all storage volume should normally be provided within the development footprint, outside of the floodplain, SuDS on floodplains can be effective in managing routine rainfall/treatment for frequent events.
- SuDS should be selected and designed taking account of the likely high groundwater table and vulnerability to erosion during periods of high flows/water levels and SuDS should not reduce floodplain storage or conveyance.
- Conveyance routes should limit grading and the creation of surface features that could either reduce floodplain capacity or be washed out in a flood.
- Surface discharge from SuDS should be dispersed with point discharges minimised or eliminated.
- All SuDS within or crossing a floodplain should take full consideration of the likely influence of river water levels on the design performance. Combined probability assessments may be required.
- Siltation and subsequent clearance after a flood event has subsided should also be taken into account in the design.

SuDS are effective technologies, which aim to reduce flood risk, improve water quality and enhance biodiversity and amenity.

The systems should aim to mimic the natural drainage of the application site to minimise the effect of a development on flooding and pollution of existing waterways. SuDS include devices such as swales, permeable pavements, filter drains, storage ponds, constructed wetlands, soakways and green roofs. The integration of nature-based solutions, such as amenity areas, ecological corridors and attenuation ponds, into public and private development initiatives, is applicable within the provisions of the Plan and should be encouraged. [Applications for development should take into account, as appropriate, the Department of Housing, Local Government and Heritage's \(2022\) "Nature-based Solutions to the Management of Rainwater and Surface Water Runoff in Urban Areas - Water Sensitive Urban Design - Best Practice Interim Guidance Document"](#).

In some exceptional cases, and at the discretion of the Council, where it is demonstrated that SuDS devices are not feasible, approval may be given to install underground attenuation tanks or enlarged pipes in conjunction with other devices to achieve the required water quality. Such alternative measures will only be considered as a last resort. Proposals for surface water attenuation systems should include maintenance proposals and procedures.

Urban developments, both within developments and within the public realm, should seek to minimise and limit the extent of hard surfacing and paving and require the use of sustainable drainage

techniques for new development or for extensions to existing developments, in order to reduce the potential impact of existing and predicted flood risk. Development proposals should be accompanied by a comprehensive SuDS assessment that addresses run-off rate, run-off quality and its impact on the existing habitat and water quality.

For larger sites (i.e. multiple dwellings or commercial units) master planning should ensure that existing flow routes are maintained, through the use of green infrastructure. In addition, where multiple individual proposals are being made SuDS should be integrated where appropriate and relevant.

All proposed development, should consider the impact of surface water flood risks on drainage design e.g. in the form of a section within the flood risk assessment (for sites in Flood Zone A or B) or part of a surface water management plan.

Pluvial flood risk is likely to be present in local areas, however; it is not taken into account in the delineation of flood zones. Furthermore, PFRA indicative pluvial maps (2012) are not considered to be reliable for the purposes of zoning or decision-making. Particular attention should be given to development in low-lying areas which may act as natural ponds for collection of run-off. The drainage design should ensure no increase in flood risk to the site, or the downstream catchment. Where possible, and particularly in areas of new development, floor levels should be at an appropriate height above adjacent roads and hard standing areas to reduce the consequences of any localised flooding. Where this is not possible, an alternative design appropriate to the location may be prepared.

Further to the above, proposals for development should consider the Construction Industry Research and Information Association (CIRIA) SuDS Manual 2015 and any future update of this guidance and Greater Dublin Strategic Drainage Study documents in designing SuDS solutions, including the New Development Policy, the Final Strategy Report, the Code of Practice and "Irish SuDS: guidance on applying the GDSDS surface water drainage criteria".

Section 4 Flood and Drainage Provisions

4.1 Introduction

In order to comply with *The Planning System and Flood Risk Management - Guidelines for Planning Authorities* (Department of the Environment, Heritage and Local Government and Office of Public Works, 2009) and Department of the Environment, Community and Local Government Circular (*PL 2/2014*) and in order to contribute towards flood risk management within the Plan area, the measures below have been integrated into the Draft Tuam Local Area Plan and the existing, already in force, Galway County Development Plan 2022-2028.

4.2 Land Use Zoning

That Flood Zones identified by the SFRA were used in line with the requirements provided for by the Flood Guidelines for land uses in Flood Zones A and B.

With respect to lands which have already been developed, the potential conflict between zonings and *highly* and *less vulnerable* development (see Tables 87 and 98 in Appendix I) were avoided by applying the constrained land use approach, with blue hatched shaded zone, 'Constrained Land Use', applied on the land use zone mapping in order to differentiate that there is a flood risk issue.

To this effect, the following provisions have been integrated into the Local Area Plan:

DM Guideline 1

Minimum Finished Floor Levels (FFL's)

In areas of limited flood depth, the specification of the threshold and floor levels of new structures shall be raised above expected flood levels to reduce the risk of flood losses to a building, by raising floor heights within the building structure using a suspended floor arrangement or raised internal concrete platforms.

When designing an extension or modification to an existing building, an appropriate flood risk reduction measure shall be specified to ensure the threshold levels into the building are above the design flood level. However, care must also be taken to ensure access for all is provided in compliance with Part M of the Building Regulations.

Where threshold levels cannot be raised to the street for streetscape, conservation or other reasons, the design shall specify a mixing of uses vertically in buildings - with less vulnerable uses located at ground floor level, along with other measures for dealing with residual flood risk.

Surface Water Drainage and Flooding

DM Standard 2: Sustainable Drainage Systems (SuDS)

All new developments (including amendments/extensions to existing developments) will be required to incorporate 'Sustainable Urban Drainage Systems' (SuDS) as part of the development/design proposals. SuDS are effective technologies which aim to reduce flood risk, improve water quality and enhance biodiversity and amenity. The systems should aim to mimic the natural drainage of the application site to minimise the effect of a development on flooding and pollution of existing waterways.

SuDS include devices such as swales, permeable pavements, filter drains, storage ponds, constructed wetlands, soakaways and green roofs. In some exceptional cases, and at the discretion of the Council, where it is demonstrated that SuDS devices are not feasible, approval may be given to install underground attenuation tanks or enlarged pipes in conjunction with other devices to achieve the required water quality. Such alternative measures will only be considered as a last resort. Proposals for surface water attenuation systems should include maintenance proposals and procedures. Development proposals will be required to be accompanied by a comprehensive SuDS assessment that addresses run-off rate, run-off quality and its impact on the existing habitat and water quality. This approach using SuDS offers a total solution to rainwater management and is applicable in urban and rural situations. Current best practice guidance on SuDS is available from the Guidance Documents produced by the Greater Dublin Strategic Drainage Study (GSDSDS).

Refer also to DM Standard 68 of the Galway County Development Plan 2022 – 2028.

**DM Standard 3: Flooding
Flood Zones and Appropriate Uses**

The table below indicates the types of land uses that are appropriate in each of the Flood Zones identified within the Plan area, in accordance with the 2009 Flood Risk Management Guidelines for Planning Authorities and Departmental Circular PL2/2014 (or any updated/superseding legislation or policy guidance).

Where developments/land uses are proposed that are inappropriate to the Flood Zone, then a Development Management Justification Test and site-specific Flood Risk Assessment will be required per The Planning System and Flood Risk Management Guidelines 2009 (and as updated).

Flood Zones	Overall probability	Planning implications for land uses		
		Highly Vulnerable Development	Less Vulnerable Development	Water Compatible Development
Flood Zone A	Highest	Inappropriate – if proposed, then Justification Test and detailed Flood Risk Assessment are required	Inappropriate – if proposed, then Justification Test and detailed Flood Risk Assessment are required	Appropriate – screen for flood risk
Flood zone B	Moderate	Inappropriate – if proposed, then Justification Test and detailed Flood Risk Assessment are required	Inappropriate due to climate change – if proposed, then Justification Test and detailed Flood Risk Assessment are required	Appropriate – screen for flood risk
Flood Zone C	Lowest	Appropriate - detailed Flood Risk Assessment may be required	Appropriate - detailed Flood Risk Assessment may be required	Appropriate – screen for flood risk

Table 3 Flood Zones Planning Implications

Refer to Flood Risk Management Guidelines 2009 and 'SFRA for the Tuam Local Area Plan 2023-2029' for additional detail:

- Highly Vulnerable Development - Houses, schools, hospitals, residential institutions, emergency services, essential infrastructure, etc.
- Less Vulnerable Development - Economic uses (retail, leisure, warehousing, commercial, industrial, non-residential institutions, etc.), land and buildings used for agriculture or forestry, local transport infrastructure, etc.
- Water Compatible Development - Docks, marinas, wharves, water-based recreation and tourism (excluding sleeping accommodation), amenity open space, sports and recreation, flood control infrastructure, etc.

Refer also to DM Standard 68 in the Galway County Development Plan 2022 – 2028.

Further to the above, following public display of the Draft Plan and associated documents, the following clarifications to the meanings of Land Use Zoning Objectives were proposed to be added to the "General Notes on Land Use Zoning Matrix" under Table 1.6.1 "Land Use Matrix" of the Plan:

- "8. Lands zoned "A - Agriculture" would not pass the Plan Making Justification Test. Furthermore, the Plan Making Justification Test is unsuitable for assessing Agricultural zoned lands, which are not consistent with the condition that any lands justified are essential in achieving compact and sustainable urban growth. Consequently, developments on lands zoned "A - Agriculture" shall be limited as per the requirements of Policy Objective TKT 41 Constrained Land Use. This limitation shall take primacy over any related provision relating to the land use zoning matrix."
- "9. Uses under "R – Residential Existing" that have not passed the Justification Test (residential developments to the north of the Weir Road and to the immediate south east of the N17) shall be limited as per the requirements of Policy Objective TKT 41 Constrained Land Use. This limitation shall take primacy over any related provision relating to the land use zoning matrix."

- 10. Uses under "Public, Community and Institutional Uses" to the east of Parkmore shall be limited in Flood Zone B to less-vulnerable and water compatible uses (as per the Flood Risk Management Guidelines).
This limitation shall take primacy over any related provision relating to the land use zoning matrix.
- 11. Uses under "Commercial and Industrial Uses" adjacent to the existing commercial/industrial development between the River Clare and the N17 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.

4.3 Integration of provisions relating to flood risk management into the existing, already in force, Galway County Development Plan

Provisions relating to flood risk management, including the following, have also been integrated into the Galway County Development Plan 2022-2028:

Table 45 County Development Plan Provisions relating to Flood Risk Management

Provision
<p>Policy Objectives Flood Risk Management</p> <p>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 Guidelines (2009) (and any updated/superseding legislation or policy guidance) and Department Circular PL2/2014 or any updated / superseding version.</p> <p>FL 2 Flood Risk Management and Assessment</p> <p>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).</p> <p>This will include the following:</p> <p>(a) Avoid, reduce and/or mitigate, as appropriate in accordance with the Guidelines;</p> <p>(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 necessary to address these impacts;</p> <p>(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 normally be permitted;</p> <p>(d) Galway County Council shall work with other bodies and organisations, as appropriate, to help protect critical infrastructure, including water and wastewater, within the County, from risk of flooding.</p> <p>FL 3 Principles of the Flood Risk Management Guidelines</p> <p>The Planning Authority shall implement the key principles of flood risk management set out in the Flood Risk Management Guidelines as follows:</p> <p>(a) Avoid development that will be at risk of flooding or that will increase the flooding risk elsewhere, where possible;</p> <p>(b) Substitute less vulnerable uses, where avoidance is not possible; and</p> <p>(c) Mitigate and manage the risk, where avoidance and substitution are not possible.</p> <p>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</p> <p>FL 4 Flood Relief Schemes</p> <p>The Planning Authority shall support and co-operate with the Office of Public Works (OPW) in the delivery of Flood Relief Schemes.</p>

Provision**FL 5 Catchment Planning**

The Planning Authority will support the OPW'S CFRAM Programme and catchment-based Flood Planning Groups, especially where catchments go 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.

FL 6 Surface Water Drainage and Sustainable Drainage Systems (SuDs)

Maintain and enhance, as appropriate, the existing surface water drainage system in the County. Ensure that new developments are adequately 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 details of surface water drainage and sustainable drainage systems proposals.

FL 7 Protection of Waterbodies and Watercourses

Protect waterbodies and watercourses within the County from inappropriate development, including rivers, streams, associated undeveloped riparian strips, wetlands and natural floodplains. This will include protection buffers in riverine, wetland and coastal areas as appropriate.

FL 8 Flood Risk Assessment for Planning Applications and CFRAMS

"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 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 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 management of any residual risks. The Planning Authority shall have regard to the results of any CFRAM Studies in the assessment of planning 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 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 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.

In addition to the County Plan SFRA datasets (including the Flood Zones, CFRAMS mapping, historical and predictive groundwater mapping, predictive pluvial mapping and historical flood risk indicator mapping, such as the Benefitting Lands mapping), new and emerging datasets (such as the OPW's National Fluvial Mapping that will supersede existing PFRA fluvial mapping for catchments greater than 5km²) must be consulted by prospective 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.

FL 9 SFRA of Lower Tier Plans

Lower tier plans shall undertake SFRA (Strategic Flood Risk Assessment) in compliance with the Flood Risk Management Guidelines.

FL 10 SFRA/FRA and Climate Change

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 to this effect.

FL 11 FRA 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 the County.

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.

FL 13 CFRAM

It is a policy objective of the Planning Authority to take account of and incorporate into local planning policy and decision making, including possible future variations to this plan, CFRAM measures that may be published in the future, including planned investment measures for managing and reducing flood risk.

FL 14 Flood Vulnerable Zones

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, internal layout, flood resilient construction, flood resistant construction, emergency response planning, access and egress during flood events.

FL 15 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.

FL 16 Benefitting Land

Applications for development on land identified as benefiting land may be prone to flooding, and as such site-specific flood risk assessments may be required in these areas.

FL 17 Consultation with OPW

Consult with the OPW in relation to proposed developments in the vicinity of drainage channels and rivers for which the OPW are responsible and retain a strip on either side of such channels where required, to facilitate maintenance access

Provision
<p>thereto. In addition, promote the sustainable management and uses of water bodies and avoid culverting or realignment of these features.</p> <p>FL 18 Inappropriate Development on Flood Zones</p> <p>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 quality and avoid potential effects to ecological features.</p> <ul style="list-style-type: none"> • Any development proposals should be considered with caution and will be required to comply with The Planning System and Flood Risk Management Guidelines for Planning Authorities/Circular PL2/2014 & the associated Development Management Justification Test. • Climate Change should be duly considered in any development proposal. • 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). • Any development proposals submitted for this site will require a detailed ecological report (s), carried out by suitably qualified personnel for the purposes of informing Appropriate Assessment Screening by Galway County Council, the competent authority. • 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 staff and the public are aware of the special conditions/constraints attached. • A briefing will be provided to relevant staff within Galway County Council on the special conditions and constraints on relevant lands.

4.4 Integration of other provisions relating to flood risk management into the Draft Local Area Plan

Further to the measures relating to land use zoning integrated into the LAP (see Section 4.2 above) and those already in force through the Galway County Development Plan 2022-2028 (see Section 4.3 above), a number of other measures relating to flood risk and drainage have been integrated into the Draft Local Area plan as detailed on Table 65 below. In combination, these provisions contribute towards a sustainable drainage strategy for the Plan area (see also Section 3.5 of this document).

Table 56 Draft Local Area Plan Provisions relating to Flood Risk Management

Provision
<p>TKT 41 Constrained Land Use</p> <p>To facilitate the appropriate management and sustainable use of Flood Risk within the zoning plan area. This zoning indicates where the Plan Making Justification Test may need to be applied and as such can limit new development, while recognising that existing development uses within these zones may require small scale development, as outlined below, over the life of the Local Area Plan, which would contribute towards the compact and sustainable urban development of the town. <u>New development will generally be limited to water-compatible uses in Flood Zone A, and less vulnerable or water compatible uses in Flood Zone B, and a detailed site-specific Flood Risk Assessment will be required in these areas.</u></p> <p>The underlying zoning or the existing permitted uses may be deemed to be acceptable in principle, however within Flood Zone A/B development is typically limited to extensions, renovations and change of use. Infill highly vulnerable development and demolition and reconstruction can only take place in Flood Zone C. Less vulnerable development in Flood Zone B will also need to be considered carefully. These aspects are assessed on a case by case basis under the application of the Plan Making Justification Test and as supported by specific objectives in the written statement.</p> <p>Where the Justification Test is passed there is also a requirement for a detailed Flood Risk Assessment at Development Management stage. The FRA should be carried out in accordance with The Planning System and Flood Risk Assessment Guidelines and Circular PL 2/2014 (or as updated), which shall assess the risks of flooding associated with the proposed development.</p> <p>Specifications for developments in flood vulnerable areas set out in this plan shall be complied with as appropriate.</p> <p>TKT 42 Flood Risk Management Guidelines</p> <p>It is a 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 Guidelines (2009) (and any updated/superseding legislation or policy guidance) and Department Circular PL2/2014 or updated/superseding version.</p> <p>TKT 43 Flood Risk Management and Assessment</p> <p>It is a policy objective of the Council to comply with the requirements of the DoEHLG/OPW <i>The Planning System and Flood Risk Management Guidelines for Planning Authorities</i> and its accompanying Technical Appendices Document 2009 (including any updated/superseding documents). This will include the following:</p> <ol style="list-style-type: none"> (a) Avoid, reduce and/or mitigate, as appropriate in accordance with the Guidelines; (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

Provision

change, such as an increase in the extent or probability of 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 locations shall not normally be permitted;

(d) Galway County Council shall work with other bodies and organisations, as appropriate, to help protect critical infrastructure, including water and wastewater, within the County from risk of flooding.

TKT 44 Principles of Flood Risk Management Guidelines

The Council shall implement the key principles of flood risk management set out in the Flood 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) Substitute less vulnerable uses, where avoidance is not possible; and,

(c) Mitigate and manage the risk, where avoidance and substitution are not possible.

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.

TKT 45 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 approach roads into Tuam.

TKT 46 Surface Water Drainage and Sustainable Drainage Systems (SuDs)

Maintain and enhance, as appropriate, the existing surface water drainage system in Tuam. Ensure that new developments are adequately serviced with surface water drainage infrastructure and promote the use of Sustainable Drainage Systems in all new developments. Surface water runoff from development sites will be limited to pre-development levels and planning applications for new developments will be required to provide details of surface water drainage and Sustainable Drainage Systems proposals. Refer also to Section 3.5 of the accompanying SFRA, "Sustainable Urban Drainage Systems and Surface Water Guidance and Strategy".

TKT 47 Protection of Waterbodies and Watercourses

Protect waterbodies and watercourses within the County from inappropriate development, including rivers, streams, associated undeveloped riparian strips, wetlands and natural floodplains. This will include protection buffers in the riverine, wetland and coastal areas as appropriate.

To contribute towards protection and improvement of the status of surface and ground waters in accordance with the Water Framework Directive.

Applications for development under the Plan must demonstrate that the proposal for development would not adversely affect a water body's ability to meet its objectives under the Water Framework Directive, individually as a result of the proposed development or cumulatively, in combination with other developments.

TKT 48 Flood Risk Assessment for Planning Applications and CFRAMS

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 guidance contained in Development Management Standards 2 and 3. 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 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 management of any residual risks. The Council shall have regard to the results of any CFRAM Studies in the assessment of planning applications. Where a development/land use 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 49 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 Assessment of Potential Future Scenarios for Flood Risk Management (or any superseding document) shall be consulted with to this effect.

TKT 50 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 51 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 52 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 OPWE Climate Change Sectoral Adaptation Plan for Flood Risk Management applicable at the time.

4.5 Justification Test

The levels of flood risk identified by the SFRA were a key informant of land uses in undeveloped areas in Flood Zones A and B. The Justification Test (including its various criteria – see **Appendix I**) is required to be passed for uses that would be otherwise considered inappropriate.

Only appropriate land uses are being proposed for previously undeveloped lands within Flood Zones A and B.

Potential conflict between zonings and *highly* and *less vulnerable* development will be avoided by applying the measures which have been integrated into the Plan, including those detailed above under Section 4 of this report.

Although Stage 3 detailed flood risk assessment has not been required for the Plan-preparation process, it may be required for individual projects following adoption of the Plan.

Table 67 Justification Tests

Site and Zoning in Draft Plan	Justification Test (Fails, if one of the following fails; All must be passed for the test to be passed)			
	Is the settlement targeted for growth under the RSES, existing CDP and/or Draft CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria ¹⁰ must be satisfied	SFRA recommendation integrated into the Plan for management of risk?	Overall Result
(Previously developed) C1 Town Centre at junction of Ballygaddy Road and Chapel Lane Note that the meaning of zoning objectives has been influenced by the SFRA process and these meanings are explained in the Draft Plan	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.	Yes, see provisions repeated in Section 4 of this report	Pass
(Previously developed) CF <u>Public, Community and Institutional Uses/Community Facilities</u> of Abbey Trinity Road Note that the meaning of zoning objectives has been influenced by the SFRA process and these meanings are explained in the Draft Plan	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.	Yes, see provisions repeated in Section 4 of this report	Pass
(Previously developed) T Tourism at Weir Road Note that the meaning of zoning objectives has been influenced by the SFRA process and these meanings are explained in the Draft Plan	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.	Yes, see provisions repeated in Section 4 of this report	Pass
Various (Previously developed) R Existing Residential zoned sites <u>(these are the existing residential developments: to the north the Weir Road in the estates of Millstream Park and Carrigweir; and along the Birmingham Road)</u> Note that the meaning of zoning objectives has been influenced by the SFRA process and these meanings are explained in the Draft Plan	Yes	This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.	Yes, see provisions repeated in Section 4 of this report	Pass
<u>Previously developed I Commercial and Industrial Uses lands between the River Clare and the N17</u>	<u>Yes</u>	<u>This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.</u>	<u>Yes, see provisions repeated in Section 4 of this report</u>	Pass
<u>Various A Agricultural sites</u> Note that the meaning of zoning objectives has been influenced by the SFRA process and these meanings are explained in the Draft Plan	<u>Yes</u>	<u>This land use zoning proposal fulfils all sub-criteria and would contribute towards overall sustainable, compact and balanced regional development by inclusion as part of the Development Plan - as confirmed by the Planning Department.</u>	<u>Yes, see provisions repeated in Section 4 of this report</u>	Pass

¹⁰ (i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement;
(ii) Comprises significant previously developed and/or under-utilised lands;
(iii) Is within or adjoining the core of an established or designated urban settlement;
(iv) Will be essential in achieving compact and sustainable urban growth; and
(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.

4.6 Proposed Material Alterations

Proposed Material Alterations MA9, MA39, MA50, MA51, MA55 and MA56 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 below:

1. The following further modification could be considered with respect to MA9, which relates to land use zoning under MA39, MA50, MA51, MA55 and MA56 (further modification to be considered – additional text in green, text to be omitted in red strikethrough):

- To update the meaning of the “BE – Business and Enterprise” land use zoning objective by adding the following to the “General Notes on Land Use Zoning Matrix” under Table 1.6.1 “Land Use Matrix”:

12. Uses “Permitted in Principle” and “Open to Consideration” for Lands zoned “BE – Business and Enterprise” shall be limited in areas, 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

would not pass the Plan Making Justification Test. Furthermore, the Plan Making Justification Test is unsuitable for assessing Business and Enterprise zoned lands, which are not consistent with the condition that any lands justified are essential in achieving compact and sustainable urban growth. Consequently, developments on lands zoned “BE Business and Enterprise” shall be limited as per the requirements of Policy Objective V Constrained Land Use.

These This limitations shall take primacy over any related provision relating to the land use zoning matrix.

- To update the meaning of the “I – Industrial” land use zoning objective by adding the following to the “General Notes on Land Use Zoning Matrix” under Table 1.6.1 “Land Use Matrix” of the Plan

13. Lands zoned “I Industrial” would not pass the Plan Making Justification Test. Furthermore, the Plan Making Justification Test is unsuitable for assessing Industrial zoned lands, which are not consistent with the condition that any lands justified are essential in achieving compact and sustainable urban growth. Consequently, developments on lands zoned “I Industrial” shall be limited as per the requirements of Policy Objective TKT 41 Constrained Land Use.

This limitation shall take primacy over any related provision relating to the land use zoning matrix

2. The following further modification could be considered with respect to MA8, which would relate to land use zoning under MA50 and MA51, MA55 and MA56 (further modification to be considered – additional text in green, text to be omitted in red strikethrough):

- To update text in the Land Use Matrix Table by adding the following to the “General Notes on Land Use Zoning Matrix” under Table 1.6.1 “Land Use Matrix” of the Plan.

11. Insert Asterix under all 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.

Section 5 Conclusion

Galway County Council has prepared a new Draft 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.

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 relevant County Development Plan shall take precedence.

The general development management standards, zoning matrix/descriptions and policies and objectives in the County Development Plan (including provisions relating to flood risk management and drainage) can be applied to the Plan area, while additional policies and objectives that are specific to Tuam are included in the LAP.

In addition, land use zoning contained within the Draft Plan has been informed by the SFRA process and associated delineation of flood risk zones. The detailed Plan preparation process undertaken by the Planning Department combined with specialist input from the SFRA process facilitated zoning that helps to avoid inappropriate development being permitted in areas of high flood risk.

Appendix I: Summary of the requirements of the Flood Guidelines for land uses in Flood Zones

Requirements relating to land uses in Flood Zones as set out in the Department of Environment, Heritage and Local Government (DEHLG) and Office of Public Works (OPW) 2009 Flood Guidelines (including at Chapter 3 Principles and Key Mechanisms and Chapter 5 Flooding and Development Management) and Departmental Circular PL2/2014 should be adhered to.

- The Sequential Approach, including the Justification test -

The key principles of the Guidelines' risk-based sequential approach (see [Figure 1](#)~~Figure 1~~) are:

- Avoid development in areas at risk of flooding. If this is not possible, consider substituting a land use that is less vulnerable to flooding. Only when both avoidance and substitution cannot take place should consideration be given to mitigation and management of risks.
- Inappropriate types of development that would create unacceptable risks from flooding should not be planned for or permitted.
- Exceptions to the restriction of development due to potential flood risks are provided for through the use of a Justification Test, where the planning need and the sustainable management of flood risk to an acceptable level must be demonstrated.

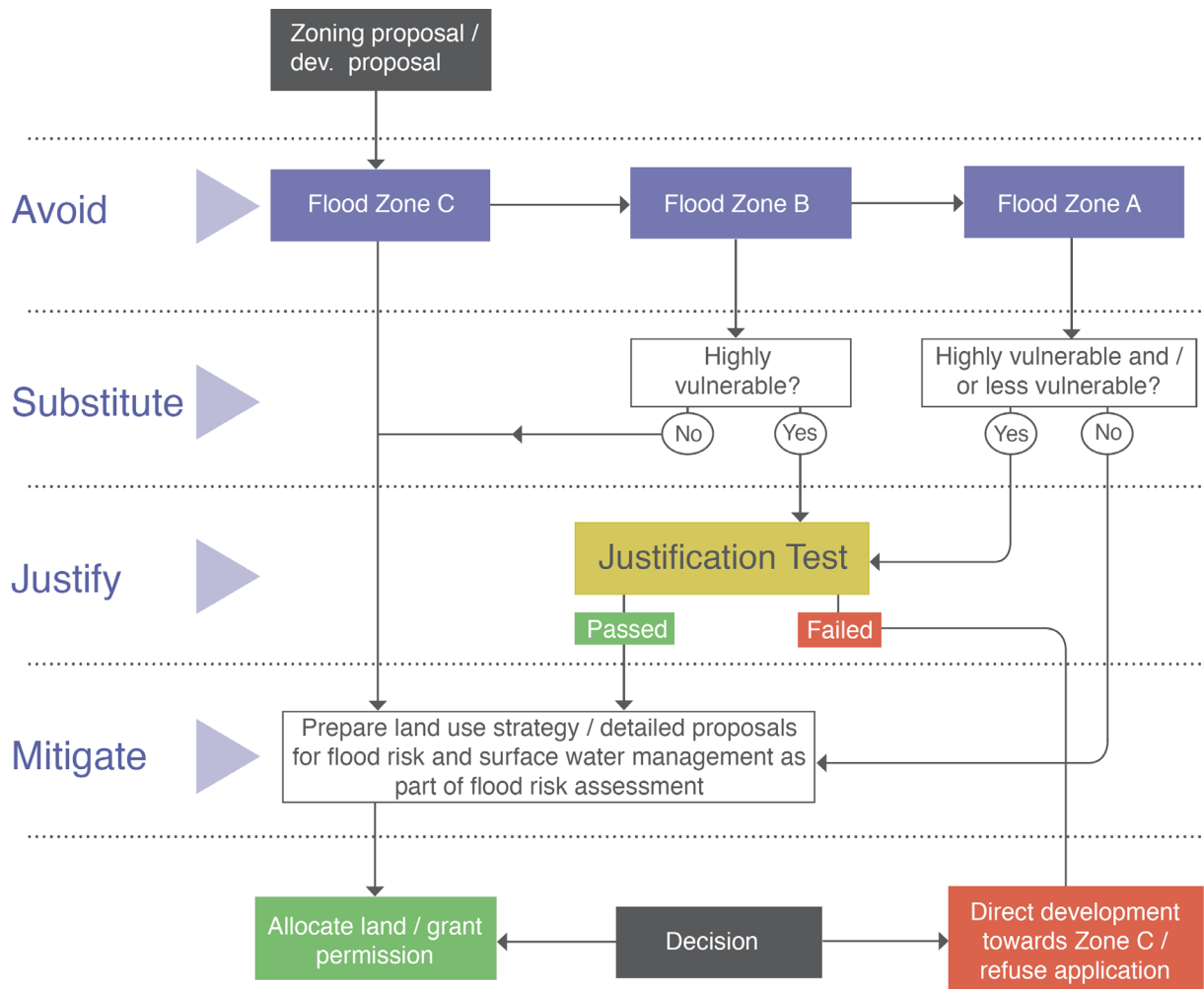


Figure 1 Sequential Approach Process¹¹

In summary, the **planning implications** for each of the flood zones are:

Zone A - High probability of flooding. Most types of development would be considered inappropriate in this zone. Development in this zone should be avoided and/or only considered in exceptional circumstances, such as in city and town centres, or in the case of essential infrastructure that cannot be located elsewhere, and where the Justification Test has been applied. Only water-compatible development, such as docks and marinas, dockside activities that require a waterside location, amenity open space, outdoor sports and recreation, would be considered appropriate in this zone.

Zone B - Moderate probability of flooding. Highly vulnerable development, such as hospitals, residential care homes, Garda, fire and ambulance stations, dwelling houses and primary strategic transport and utilities infrastructure, would generally be considered inappropriate in this zone, unless the requirements of the Justification Test can be met. Less vulnerable development, such as retail, commercial and industrial uses, sites used for short-let for caravans and camping and secondary strategic transport and utilities infrastructure, and water-compatible development might be considered appropriate in this zone. In general however, less vulnerable development should only be considered in this zone if adequate lands or sites are not available in Zone C and subject to a flood risk assessment to the appropriate level of detail to demonstrate that flood risk to and from the development can or will adequately be managed.

Zone C - Low probability of flooding. Development in this zone is appropriate from a flood risk perspective (subject to assessment of flood hazard from sources other than rivers and the coast) but

¹¹ Flood Zone C covers all areas outside of Zones A and B

would need to meet the normal range of other proper planning and sustainable development considerations.

~~Table 8~~ ~~Table 7~~ overleaf classifies the vulnerability of different types of development while ~~Table 9~~ ~~Table 8~~ identifies the appropriateness of development belonging to each vulnerability class within each of the flood zones as well as identifying what instances in which the Justification Test should be undertaken. Inappropriate development that does not meet the criteria of the Justification Test should not be considered at the plan-making stage or approved within the development management process.

Table 78 Classification of vulnerability of different types of development

Vulnerability class	Land uses and types of development which include*:
Highly vulnerable development (including essential infrastructure)	<p>Garda, ambulance and fire stations and command centres required to be operational during flooding;</p> <p>Hospitals;</p> <p>Emergency access and egress points;</p> <p>Schools;</p> <p>Dwelling houses, student halls of residence and hostels;</p> <p>Residential institutions such as residential care homes, children's homes and social services homes;</p> <p>Caravans and mobile home parks;</p> <p>Dwelling houses designed, constructed or adapted for the elderly or, other people with impaired mobility; and</p> <p>Essential infrastructure, such as primary transport and utilities distribution, including electricity generating power stations and sub-stations, water and sewage treatment, and potential significant sources of pollution (SEVESO sites, IPPC sites, etc.) in the event of flooding.</p>
Less vulnerable development	<p>Buildings used for: retail, leisure, warehousing, commercial, industrial and non-residential institutions;</p> <p>Land and buildings used for holiday or short-let caravans and camping, subject to specific warning and evacuation plans;</p> <p>Land and buildings used for agriculture and forestry;</p> <p>Waste treatment (except landfill and hazardous waste);</p> <p>Mineral working and processing; and</p> <p>Local transport infrastructure.</p>
Water-compatible development	<p>Flood control infrastructure;</p> <p>Docks, marinas and wharves;</p> <p>Navigation facilities;</p> <p>Ship building, repairing and dismantling, dockside fish processing and refrigeration and compatible activities requiring a waterside location;</p> <p>Water-based recreation and tourism (excluding sleeping accommodation);</p> <p>Lifeguard and coastguard stations;</p> <p>Amenity open space, outdoor sports and recreation and essential facilities such as changing rooms; and</p> <p>Essential ancillary sleeping or residential accommodation for staff required by uses in this category (subject to a specific warning and evacuation plan).</p>
*Uses not listed here should be considered on their own merits	

Table 89 Vulnerability Classes and Flood Zones

	Flood Zone A	Flood Zone B	Flood Zone C
Highly vulnerable development (including essential infrastructure)	Justification Test	Justification Test	Appropriate
Less vulnerable development	Justification Test	Appropriate	Appropriate
Water-compatible development	Appropriate	Appropriate	Appropriate

The **Justification Test** which is referred to as part of the Sequential Approach is an assessment of whether a development proposal within an area at risk of flooding meets specific criteria for proper planning and sustainable development and demonstrates that it will not be subject to unacceptable risk nor increase flood risk elsewhere. The Justification Test should be applied only where development is within flood risk areas that would be defined as inappropriate under the screening test of the sequential risk based approach outlined above. This Justification Test is shown below.

Where, as part of the preparation and adoption or variation and amendment of a development/local area plan¹, a planning authority is considering the future development of areas in an urban settlement that are at moderate or high risk of flooding, for uses or development vulnerable to flooding that would generally be inappropriate as set out in Table 3.2, all of the following criteria must be satisfied:

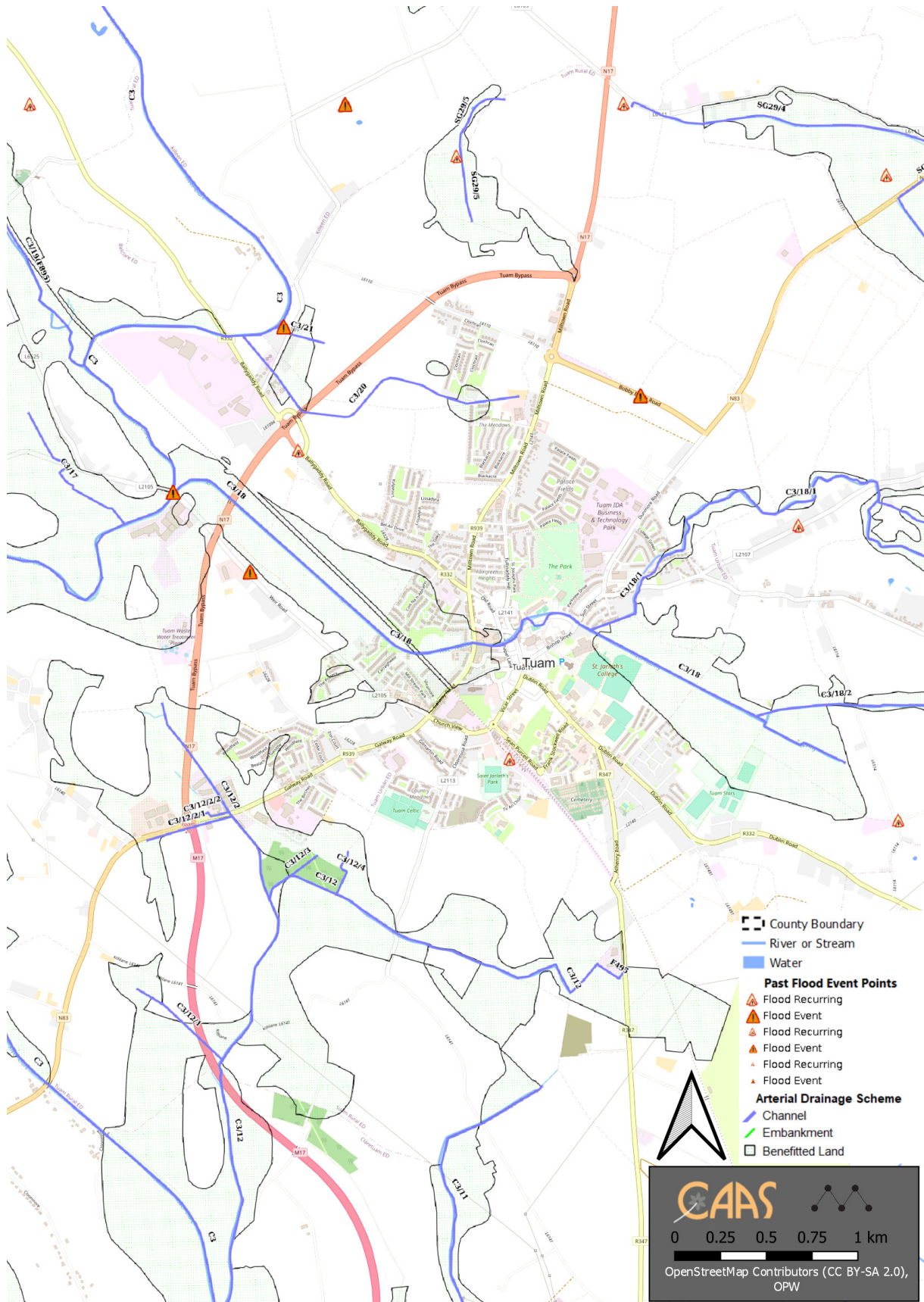
- 1 The urban settlement is targeted for growth under the National Spatial Strategy, regional planning guidelines, statutory plans as defined above or under the Planning Guidelines or Planning Directives provisions of the Planning and Development Act, 2000, as amended.
- 2 The zoning or designation of the lands for the particular use or development type is required to achieve the proper planning and sustainable development of the urban settlement and, in particular:
 - (i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement²;
 - (ii) Comprises significant previously developed and/or under-utilised lands;
 - (iii) Is within or adjoining the core³ of an established or designated urban settlement;
 - (iv) Will be essential in achieving compact and sustainable urban growth; and
 - (v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement⁴
- 3 A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.

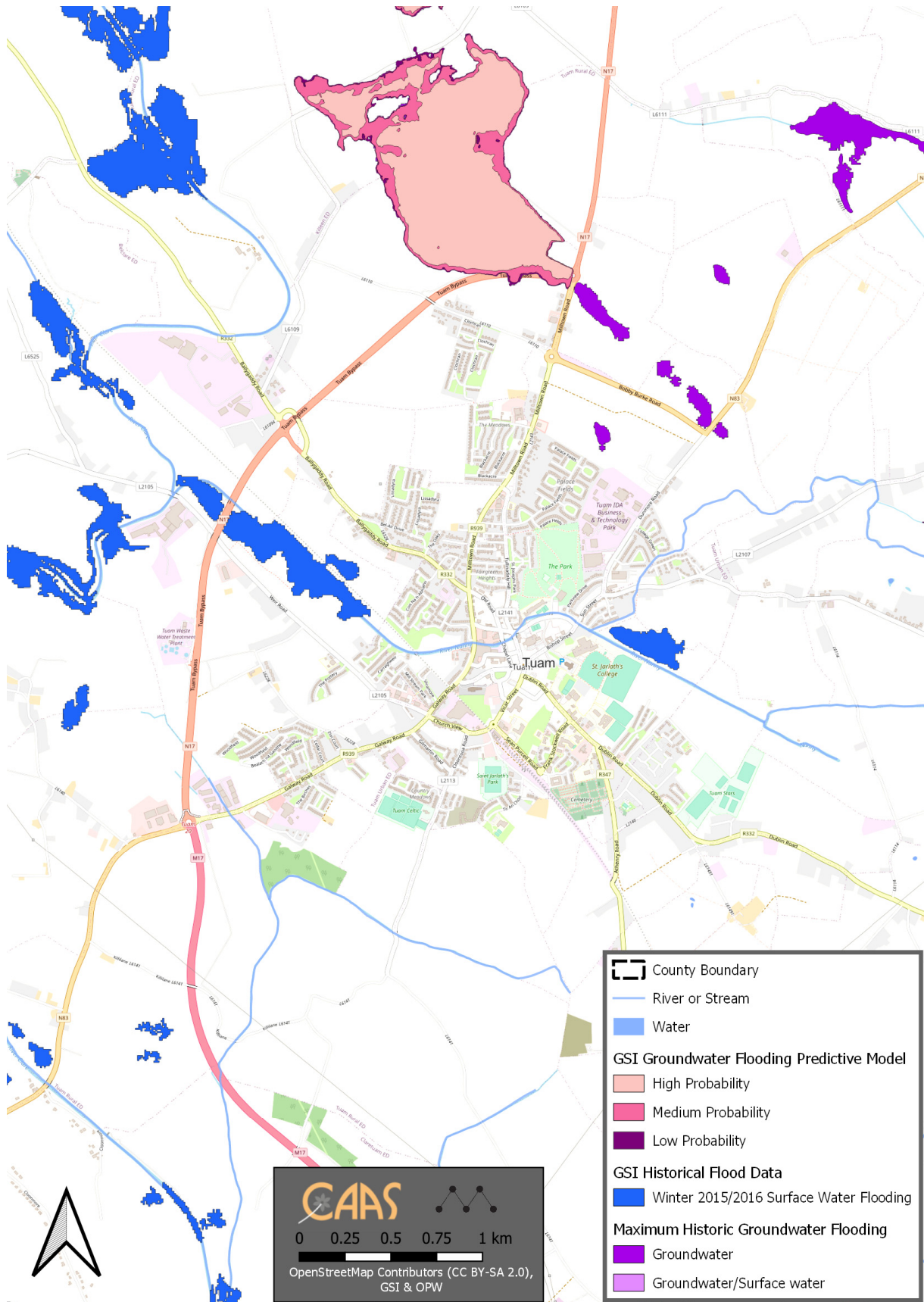
N.B. The acceptability or otherwise of levels of any residual risk should be made with consideration for the proposed development and the local context and should be described in the relevant flood risk assessment.

Figure 2 Justification Test ¹²

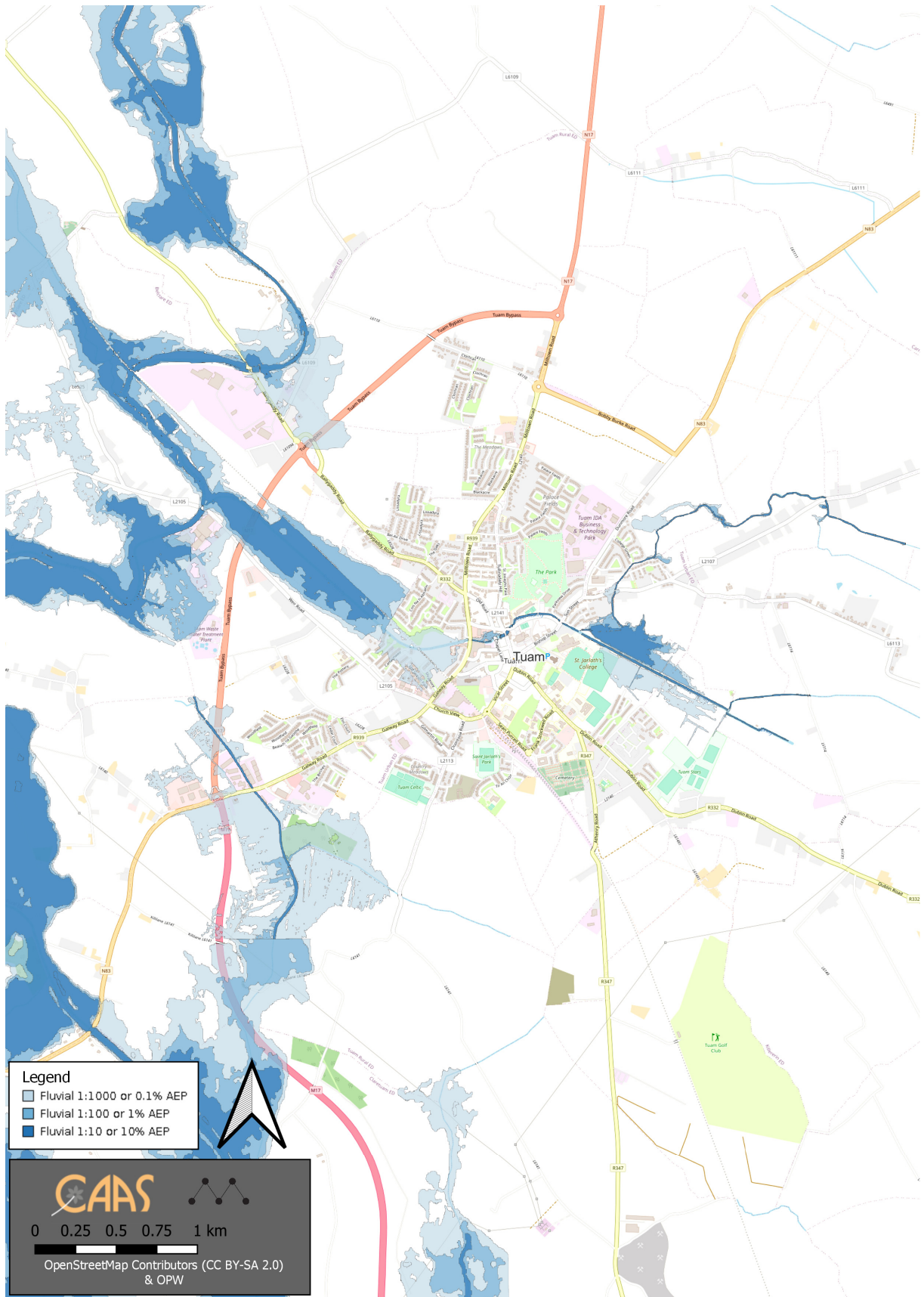
¹² Footnotes: ¹ Including Strategic Development Zones and Section 25 Schemes in the area of the Dublin Docklands Development Authority ²In the case of Gateway planning authorities, where a number of strategic growth centres have been identified within the overall area of the authority, the Justification Test may be applied for vulnerable development within each centre. ³ See definition of the core of an urban settlement in Glossary of Terms. ⁴ This criterion may be set aside where section 4.27b applies.

Appendix II: Flood Risk Indicator and Zone Mapping

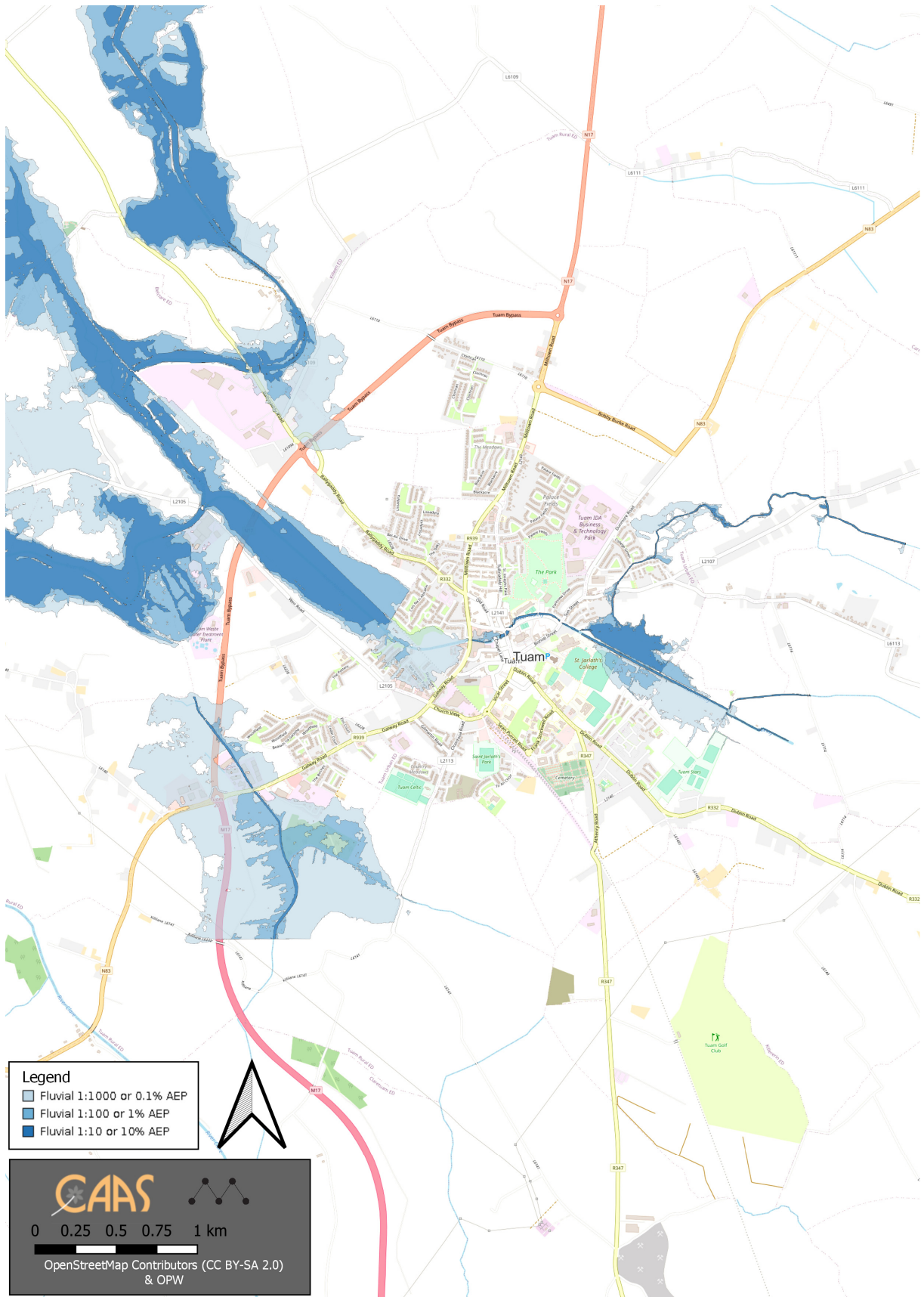




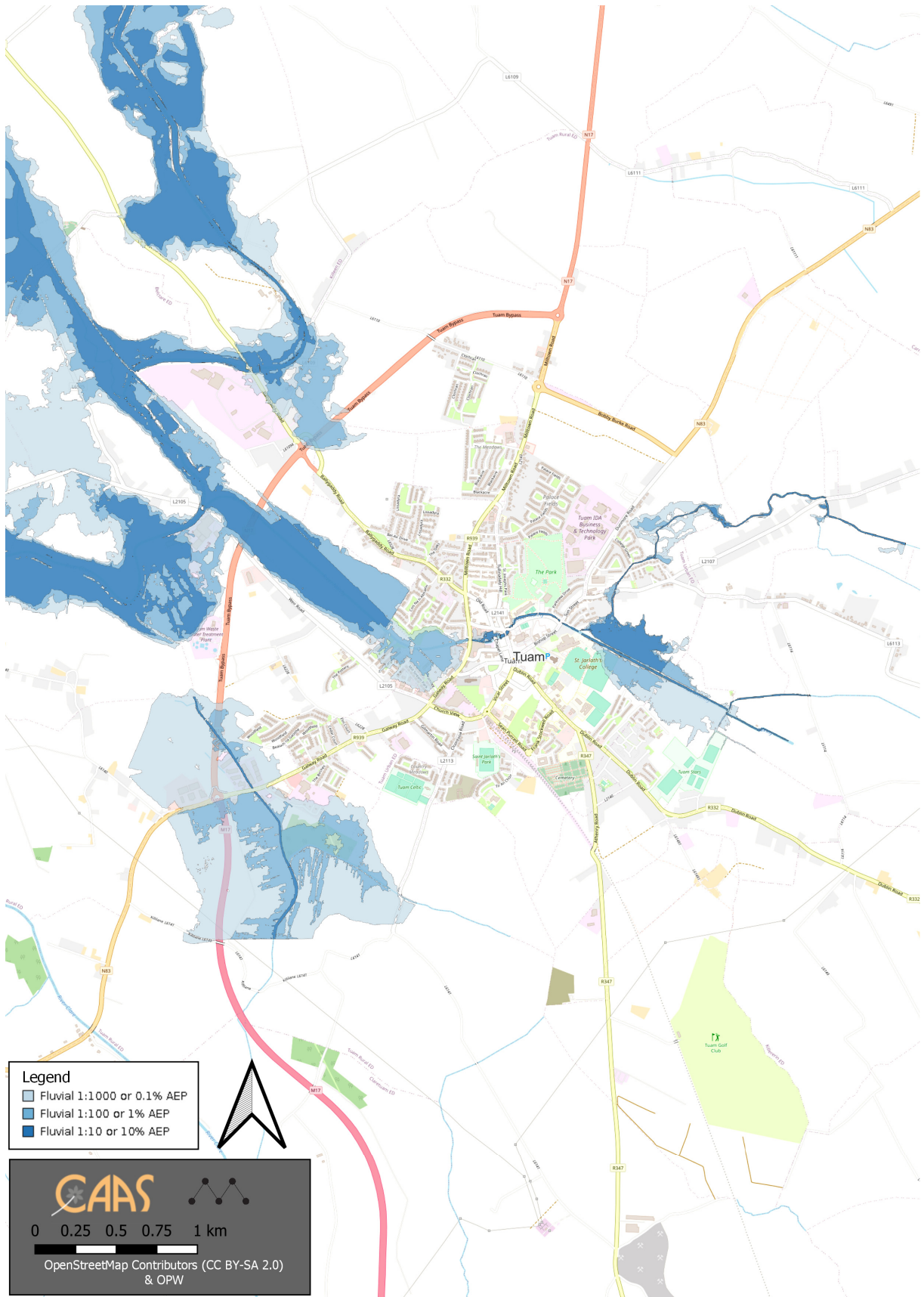
Selection of Groundwater Indicators

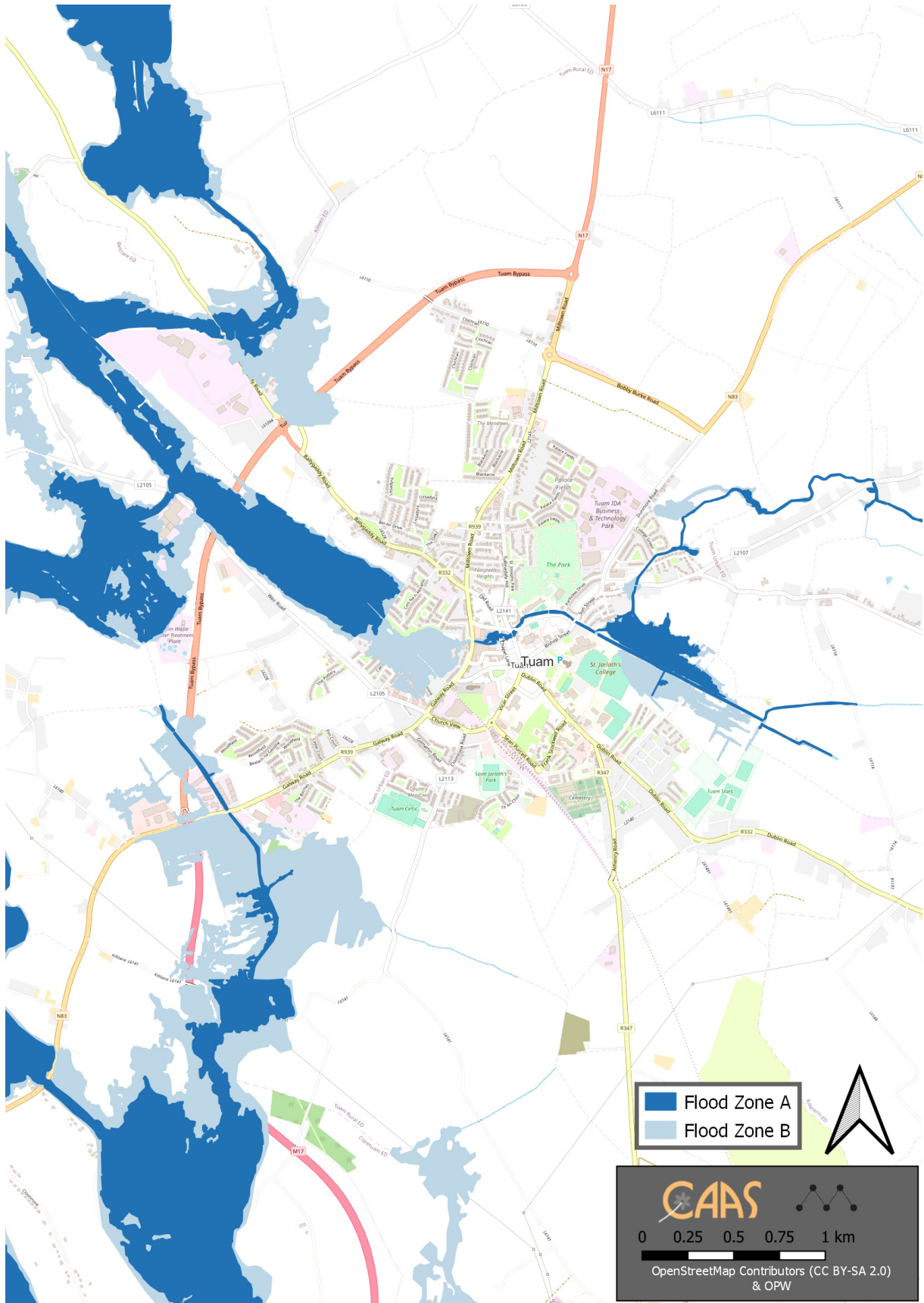


CFRAMS Present Day



CFRAMS Mid-Range





Flood Zones A and B