STRATEGIC ENVIRONMENTAL ASSESSMENT ENVIRONMENTAL REPORT

FOR

VARIATION No. 2 (B) TO THE GALWAY COUNTY DEVELOPMENT PLAN 2015-2021

GAELTACHT PLAN

(INCLUDING SETTLEMENTS OF AN CHEATHRÚ RUA, AN SPIDÉAL AND BAILE CHLÁIR)

for: Galway County Council

Áras an Chontae Prospect Hill Galway



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Table of Contents

List of Abbreviationsv				
Glossary	y	vi		
Section	1 SEA Introduction and Background	1		
1.1	Introduction and Terms of Reference	1		
1.2	SEA Definition			
1.3	SEA Directive and its transposition into Irish Law			
1.4	Implications for Variation 2 (b) and the Council	1		
Section	2 Variation 2 (b)	2		
2.1	Introduction	2		
2.2	Strategic Vision of the Gaeltacht Plan	2		
2.3	Structure of the Variation	3		
2.4	Relationship with other relevant Plans and Programs	3		
Section	3 SEA Methodology	4		
3.1	Introduction to the Iterative Approach	4		
3.2	Appropriate Assessment and Integrated Biodiversity Impact Assessment			
3.3	Strategic Flood Risk Assessment			
3.4	Scoping	5		
3.5	Environmental Report	6		
3.6	SEA Statement	6		
Section	4 Relevant aspects of the current state of the Environment	8		
4.1	Introduction	8		
4.2	Likely Evolution of the Environment in the Absence of the Variation			
4.3	Biodiversity and Flora and Fauna			
4.4	Population and Human Health			
4.5	Soil	21		
4.6	Water	23		
4.7	Air and Climatic Factors	37		
4.8	Material Assets			
4.9	Cultural Heritage			
4.10	Landscape	49		
Section	5 Strategic Environmental Objectives	. 55		
Section	6 Description of Alternatives	. 59		
6.1	Introduction	59		
6.2	Alternative 1: Even Development	59		
6.3	Alternative 2: Sporadic Development			
6.4	Alternative 3: Haphazard Development	60		
Section	7 Evaluation of Alternatives	. 67		
7.1	Introduction	67		
7.2	Methodology			
7.3	Cumulative Effects			

7.4 7.5	Detailed Assessment of Alternatives The Selected Alternative for the Variation	
Section	8 Assessment of Variation 2 (b)	78
8.1	Introduction	
8.2	Overall Evaluation	
8.3	Appropriate Assessment	
8.4	Strategic Flood Risk Assessment	
8.5	Interrelationship between Environmental Components	
8.6	Vision	
8.7	An Gaeltacht Objectives	
8.8	Land Use Zoning and Development Objectives for An Cheathrú Rua, An S	oidéal and Baile
Chláir	86	
8.9	Assessment of Proposed Material Alterations	92
Section	9 Mitigation Measures	93
9.1	Introduction	93
9.2	Integration of Environmental Considerations	
Section	10 Monitoring Measures	96
10.1	Introduction	96
10.2	Indicators and Targets	
10.3	Sources	96
10.4	Reporting	96
10.5	Thresholds and Corrective Action	97
Append	ix I Relationship with Legislation and Other Plans and Progra	mmes 101
Append	ix II Non-Technical SummarySepar	ately Bound

List of Figures

Figure 3.1 Overview of Variation 2b/SEA/AA Process and Outputs	
Figure 4.1 European Sites and Water Management Units within 15 km buffer of the Gaeltacht	Plan
area	
Figure 4.2 Natural Heritage Areas, Proposed Natural Heritage areas and Water Management L	
within 15 km buffer of the Gaeltacht Plan area	
Figure 4.3 Freshwater Pearl Mussel Sensitive Areas, Shellfish Areas, Nature Reserves and W	
Management Units within 15 km buffer of the Gaeltacht Plan area	
Figure 4.4 Part of the Kilkieran Bay and Islands SAC, Ecological Network Classes, blanket peat	
WFD River Sub-Basins at An Cheathrú Rua	
Figure 4.5 An Cheathrú Rua CORINE Land Cover Mapping 2012	
Figure 4.6 Part of the Connemara Bog Complex SAC and pNHA and part of Moycullen Bogs N	
Ecological Network Classes, blanket peat and WFD River Sub-Basins at An Spidéal	
Figure 4.7 An Spidéal CORINE Land Cover Mapping 2012	
Figure 4.8 Part of the Lough Corrib SAC, Ecological Network Classes, cutaway raised bog and \	
River Sub-Basins at Baile Chláir	
Figure 4.9 Baile Chláir CORINE Land Cover Mapping 2012	
Figure 4.10 Available information on Water Quality Status (2010-2015) for Surface Water Bodies	
Figure 4.11 An Cheathrú Rua: Available information on Water Quality Status (2010-2015) for Sur	
Water Bodies	
Figure 4.12 An Cheathrú Rua: Groundwater Vulnerability	
Figure 4.13 An Spidéal: Available information on Water Quality Status (2010-2015) for Surface Wa	
and Bathing Water Quality	
Figure 4.14 An Spidéal: Groundwater Vulnerability	31
Figure 4.15 Baile Chláir: Available Water Quality Status (2010-2015) information for Surface Water	
Figure 4.16 Baile Chláir: Groundwater Vulnerability	
Figure 4.17 An Cheathrú Rua: Flood Zones (fluvial and coastal)	
Figure 4.18 An Spidéal: Flood Zones (fluvial and coastal)	
Figure 4.19 Baile Chláir: Flood Zones (fluvial and coastal)	
Figure 4.20 An Cheathrú Rua Cultural Heritage – Archaeological and Architectural Designations	
Figure 4.21 An Spidéal Cultural Heritage – Archaeological and Architectural Designation	
Figure 4.22 Baile Chláir Cultural Heritage – Archaeological and Architectural Designations	
Figure 4.23 Landscape Sensitivity County Galway	
Figure 4.24 An Cheathrú Rua Landscape Sensitivity	
Figure 4.25 An Spidéal Landscape Sensitivity	
Figure 4.26 An Spidéal Focal Points/Views	
Figure 4.27 Baile Chláir Focal Points/Views	
Figure 6.1 An Cheathrú Rua Alternative 1	01
Figure 6.3 An Spidéal Alternative 1	
·	
Figure 6.4 An Spidéal Alternative 2	
Figure 6.5 Baile Chláir Alternative 1	
Figure 7.1 Land Use Zoning An Cheathrú Rua	
Figure 7.2 Land Use Zoning An Spidéal	
Figure 7.3 Land Use Zoning Baile Chláir	
rigare 7.0 Lana USC Authing Dane Official	/ /

List of Tables

Table 3.1 Checklist of Information included in this Environmental Report	7
Table 4.1 Urban Waste Water Treatment in County Galway in 2016	42
Table 5.1 Strategic Environmental Objectives, Indicators and Targets	56
Table 7.1 Strategic Environmental Objectives	68
Table 7.2 Criteria for appraising the effect of Alternatives on SEOs	
Table 7.3 Significant Positive Effects common to all Alternatives	71
Table 7.4 Potentially Significant Adverse Environmental Effects, if unmitigated,	common to all
alternativesalternatives	72
Table 7.5 Assessment of Alternatives against Strategic Environmental Objectives	73
Table 8.1 Criteria for appraising the effect of Plan provisions on SEOs	78
Table 8.2 Overall Evaluation – Effects arising from Variation 2 (b)	80
Table 8.3 Presence of Interrelationships between Environmental Components	83
Table 9.1 Integration of Environmental Considerations	94
Table 10.1 Selected Indicators, Targets and Monitoring Sources	98

List of Abbreviations

AA Appropriate Assessment

ACA Architectural Conservation Area

CFRAM Catchment Flood Risk Assessment and Management

CSO Central Statistics Office

DEHLG Department of the Environment, Heritage and Local Government

EPA Environmental Impact Assessment
EPA Environmental Protection Agency

EU European Union

GSI Geological Survey of Ireland

NHA Natural Heritage Area

NIAH National Inventory of Architectural Heritage

NSS National Spatial Strategy
OPW Office of Public Works
RAL Remedial Action List
RBD River Basin District

RMP Record of Monuments and Places

RPA Register of Protected Areas

RPS Record of Protected Structures

RPGs Regional Planning Guidelines

RBMP River Basin Management Plan

SAC Special Area of Conservation

SEA Strategic Environmental Assessment
SEO Strategic Environmental Objective

SI No. Statutory Instrument Number

SPA Special Protection Area

WFD Water Framework Directive

Glossary

Appropriate Assessment

The obligation to undertake Appropriate Assessment 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 so that they come 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.

Protected Structure

Protected Structure is the term used in the Planning and Development Act 2000 as amended to define a structure included by a local 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 local 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 Variation 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 Background

1.1 Introduction and Terms of Reference

This is the Strategic Environmental Assessment (SEA) Environmental Report for Variation 2 (b) to the Galway County Development Plan 2015-2021. 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 preparation of Variation 2 (b) to Galway County Development Plan under Sections 11 and 12 of the Planning and Development Act 2000 (as amended). The SEA is carried out in order to contribute Planning and Development Environmental Assessment) (Strategic Regulations 2004 (Statutory Instrument Number (SI No. 436 of 2004) as amended. This report should be read in conjunction with Variation 2 (b).

1.2 SEA Definition

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 insure that these effects are adequately addressed at the earliest appropriate stages of decision-making in tandem with economic, social and other considerations.

1.3 SEA Directive and its transposition into Irish Law

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, referred to hereafter as the SEA Directive, introduced the requirement that SEA be carried out on plans and programmes which are prepared for a number of sectors, including land use.

The SEA Directive was transposed into Irish Law through the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (Statutory Instrument Number (SI No. 435 of 2004) and the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004). Both sets of Regulations became operational on 21st July 2004. The Regulations have been amended by the Communities (Environmental European Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011 (SI No. 200 of 2011) and the Planning and Development Environmental (Strategic Assessment) (Amendment) Regulations 2011 (SI No. 201 of 2011).

1.4 Implications for Variation 2 (b) and the Council

This report may be altered in order to take account of recommendations contained in submissions and in order to take account of any changes which are made to Variation 2 (b) on foot of submissions. Galway County Council has taken into account the findings of this report and other related SEA output during their preparation and making of Variation 2 (b). On finalisation of the Variation, an SEA Statement will be prepared which summarises, inter alia, how environmental considerations have been integrated into Variation 2 (b).

Section 2 Variation 2 (b)

2.1 Introduction

The purpose of Variation 2 (b) to the Galway County Development Plan 2015-2021 is to Gaeltacht LAP include the (including settlement zonings for An Cheathrú Rua, An Spidéal and Baile Chláir). This variation, in conjunction with the County Development Plan manage inform and the development of the Gaeltacht area. The Galway Gaeltacht covers extensive parts of County Galway. It stretches from Baile Chláir, to the east of the city to Cloch na Ron in west Connemara, a distance of c. 100km and from Árann northwards Duiche Oileán to Sheoigheach which borders County Mayo. The Gaeltacht area also spans townlands that are within Galway City boundary.

The Gaeltacht Local Area Plan was adopted in 2008, and was amended and extended in 2013. The current Gaeltacht LAP consists of the plan context, strategy, overview of the Districts and settlement plans for An Cheathrú Rua and An Spidéal. Baile Chláir is in the Gaeltacht, considering the previous plan Local Area Plan for Baile Chláir has now expired, it is prudent should be that Baile Chláir incorporated into the Gaeltacht plan. There are a number of other settlements in the Gaeltacht that have their own Local Area Plan, Maigh Cuillin has a plan in situ until 2019 and Bearna forms part of Variation No. 2 (a) and will sit alongside the Gaeltacht Plan, Variation No. 2 (b).

The aim of Variation 2 (b) is to establish a framework for the planned, co-ordinated and sustainable development of the Gaeltacht area, and to enhance and facilitate the balancing of economic, social and environmental infrastructure in order to maintain and develop a high quality of life, without compromising the protection of the environment and the needs of future generations.

2.2 Strategic Vision of the Gaeltacht Plan

The Strategic Vision of the Gaeltacht Plan is as follows:

The Gaeltacht area is a unique and a special place and it is important that it retains that distinctive cultural heritage and natural beauty which is of National significance through the principles of sustainable development. whilst meeting the needs and aspirations of both the residents' and visitors alike. Achieving the objectives of the Galway County Development Plan in order to sustain and develop the local economy and improve the quality of life for local residents.

This Strategic Vision is informed by the following guiding principles that will enable the overall vision to be achieved:

- Promote a sustainable level of development that is appropriate to the character, heritage, amenity and strategic role of the Gaeltacht area including the settlements of An Cheathrú Rua, An Spidéal and Baile Chláir in order for these areas to develop:
- Support an appropriate level of services and infrastructure to support existing and future growth and sustainable development in a manner that protects and is complementary to the environment, heritage, character and amenities of the Gaeltacht villages;
- Promote and support the Blue Flag, Green Coast FLAG and other related initiatives;
- To adhere to the aims of the Government's "20-Year Strategy for the Irish Language 2010 – 2030" including the preservation and promotion of Irish in the Gaeltacht, conserving and protecting the heritage, culture and richness of the language as well as strengthening the position of the Irish Language in the home, workplace and community;

- Promote a strong sense of community spirit, civic pride, local identity and social inclusiveness, and promoting the status of the Irish language in the area and its contribution to the linguistic heritage of An Gaeltacht;
- Provide for the consolidation and coherent growth of settlements and rural areas within Galway Gaeltacht;
- Provide for the improvement of community and sporting infrastructure programmes within the Galway Gaeltacht:
- Provide a high quality movement network for pedestrians, cyclists and vehicles with priority for public transport within the Galway Gaeltacht;
- Improve the transport network access to Oileán Árann in terms of air and sea routes:
- Protect and conserve the rich built and natural heritage of the Galway Gaeltacht;
- Develop the cultural, historic and tourism potential of the area in a sustainable manner; and
- It is recognised that some of the strongest Gaeltacht area as regards the daily use of the Irish language are now imperilled by economic and social decline as indicated in the Census and social and economic reports. This Plan supports the development of a sufficient level of services and infrastructure to ensure the economic and social viability of Gaeltacht communities and recognise the threats to more peripheral geographic areas.

2.3 Structure of the Variation

The Variation is structured as follows:

- Section 1, which out the high level strategies and objectives that are common to all areas and districts of the Gaeltacht;
- Section 2, which sets out the zoning objectives for the three settlements of An Cheathrú Rua, An Spidéal and Baile Chláir; and
- Section 3, which sets out detailed plans for the three settlements of An Cheathrú Rua, An Spidéal and Baile Chláir including land use maps and flood maps.

Community Development Framework Guidance for Oileán Árann is provided as an appendix to the Variation.

2.4 Relationship with other relevant Plans and Programs

Variation 2 (b) sits within a hierarchy of strategic actions such as plans and programmes and is subject to a number of high level environmental protection policies and objectives with which it must comply (including those detailed in Appendix I, Section 4, Section 5 and Section 9 of this report).

Examples of Environmental Protection Objectives include the aim of the EU Habitats Directive - which is to contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora in the European territory of Member States and the purpose of the Water Framework Directive - which is to establish a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwater which, among other things, prevents deterioration in the status of all water bodies and protects, enhances and restores all waters with the aim of achieving good status.

Section 3 SEA Methodology

3.1 Introduction to the Iterative Approach

Figure 3.1 provides an overview of the integrated Variation preparation, SEA, Appropriate Assessment (AA) and Strategic Flood Risk Assessment (SFRA) processes. The preparation of the Variation, SEA and AA have taken place concurrently and the findings of the SEA, AA and SFRA have informed Variation 2 (b).

SEA, AA and SFRA documents accompanied the Proposed Variation on public display. Submissions made on the Proposed Variation 2 (b) and associated documents were responded to and updates were made to Variation and associated documents. Proposed changes to the Variation, referred to as proposed material alterations, were subjected to SEA and AA screening.

On finalisation of Variation 2 (b), an SEA Statement and an AA Conclusion Statement were prepared that summarise, inter alia, how environmental considerations have been integrated into the Plan, as varied. The Plan will be implemented and environmental monitoring will be undertaken.

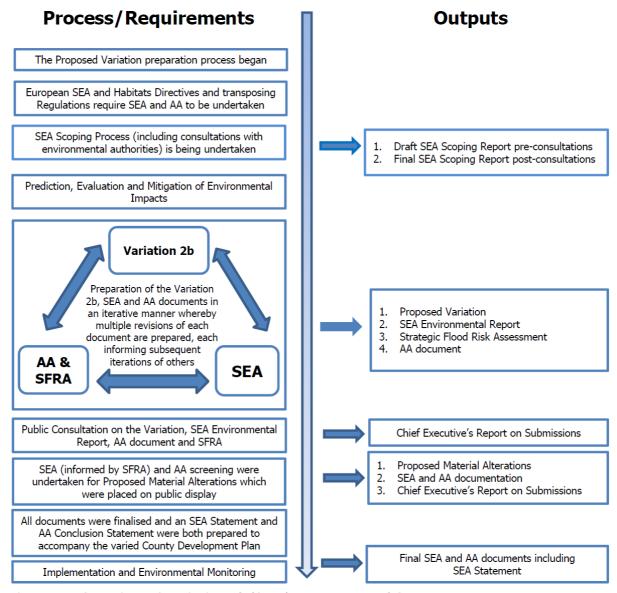


Figure 3.1 Overview of Variation 2b/SEA/AA Process and Outputs

3.2 Appropriate Assessment and Integrated Biodiversity Impact Assessment

3.2.1 Appropriate Assessment

A Stage 2 Appropriate Assessment (AA) has been undertaken alongside the preparation of Variation 2 (b).

The requirement for AA is provided under the EU Habitats Directive (Directive 1992/43/EEC).

The preparation of the Variation, SEA and AA has taken place concurrently and the findings of the AA have informed both the Variation and the SEA. All recommendations made by the AA were integrated into the Variation.

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 Variation. These include:

Scoping

- Biodiversity-relevant issues were identified for consideration at scoping stage and these are now detailed in Section 4.3.
- Reference to a zone of influence is provided, including at Section 4.3.

Current State of the Environment

- Biodiversity data sources relevant for this national level assessment have been identified.
- Designated sites and other habitats and species of ecological value are identified.
- AA information has been incorporated into the SEA.

Alternatives

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

Impact assessment

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

Mitigation and monitoring

 Taking into account all measures contained within Variation 2 (b), all of the 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 from various environmental authorities have been taken on board.
- The preparation of the Variation, SEA and AA has taken place concurrently and the findings of the AA have informed both the Variation and the SEA.

3.3 Strategic Flood Risk Assessment

A Strategic Flood Risk Assessment (SFRA) has been undertaken alongside the preparation of the Variation. The requirement for SFRA is provided under 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (DEHLG and OPW, 2009).

The preparation of the Variation, SEA and SFRA has taken place concurrently and the findings of the SFRA have informed both the Variation and the SEA. The SFRA has facilitated the integration of flood risk management considerations into the Variation.

3.4 Scoping

3.4.1 Introduction

The scope of environmental issues to be dealt with by the SEA together with the level of detail to which they are addressed was decided upon taking into account the level of detail included in the Variation and submissions received from environmental authorities. Scoping allowed the SEA to become focused upon key issues relevant to the environmental components which are specified under the SEA Directive¹.

¹ 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.

3.4.2 Scoping Notices and Submissions

As part of the scoping process, environmental authorities² were notified that a submission or observation in relation to the scope and level of detail of the information to be included in the environmental report could be made to the Council.

Submissions were made by the Environmental Protection Agency and Department of Culture, Heritage and Gaeltacht. These submissions influenced the scope of the assessments as detailed in the final SEA Scoping Report.

3.5 Environmental Report

The SEA Environmental Report predicts and evaluates the likely environmental effects of Variation 2 (b) and relevant alternatives. The Environmental Report provides the Council, stakeholders and the public with a clear understanding of the likely environmental consequences of Variation 2 (b).

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

This report will be updated in order to take account of recommendations contained in submissions and in order to take account of any changes which are made to the original, Variation that is placed on public display. Changes to the Variation will be examined for the need to undertake SEA and AA.

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

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

3.6 SEA Statement

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

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

² The following authorities were notified: Environmental Protection Agency, Department of Communications, Climate Action and Environment, Department of Agriculture, Food and the Marine, Department of Housing, Planning and Local Government, Department of Culture, Heritage and the Gaeltacht, Galway City Council, Mayo County Council, Roscommon County Council, Offaly County Council, Tipperary County Council and Clare County Council.

Table 3.1 Checklist of Information included in this Environmental Report

Information Required to be included in the Environmental Report	Corresponding Section(s) 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 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 and 9
(F) Describe the likely significant effects on the environment	Sections 7 and 8
(G) Describe any measures envisaged to prevent, reduce and as fully as possible offset any significant adverse environmental effects of implementing the plan or programme	Section 9
(H) Give an outline of the reasons for selecting the alternatives considered, and a description of how the assessment was undertaken (including any difficulties)	Sections 6, 7 and 8
(I) A description of proposed monitoring measures	Section 10
(J) A non-technical summary of the above information	Non-Technical Summary
(K) Interrelationships between each environmental topic	Addressed as it arises within each Section

Section 4 Relevant aspects of the current state of the Environment

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 identified 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 identification includes information that is relevant to lower tier environmental assessments and decision making (note that Article 5 of the SEA Directive, in accordance with the established European principle of subsidiarity, requires that the Environmental Report includes the information that may reasonably be required taking into account, inter alia, the extent to which certain matters are more appropriately assessed at different levels in that process in order to avoid duplication of the assessment).

4.2 Likely Evolution of the Environment in the Absence of the Variation

Variation 2 (b) has been prepared to further contribute towards the framework for proper planning and sustainable development that is provided for by the County Development Plan. The previous Gaeltacht Plan which included land use zoning for An Cheathrú Rua and An Spidéal was scheduled to expire in 2018. There was no land use zoning for Baile Chláir in place. In the absence of the Variation, new developments would have been examined against the existing provisions included within the Development Plan. This situation associated likely evolution of the environment - most closely equates with alternative number three that has been identified and considered as part of this Environmental Assessment (see Section 6 and Section 7).

4.3 Biodiversity and Flora and Fauna

4.3.1 Overview

There are various highly sensitive and designated areas within Gaeltacht Plan area on account of the species and habitats which they contain. Such areas include the Kilkieran Bay and Islands cSAC (located to the north-west of An Cheathrú Rua), Connemara Bog Complex cSAC (adjacent to An Spidéal) and Moycullen Bogs NHA (located to the north of An Spidéal). Also present is the main channel of the River Corrib (adjacent to the Gaeltacht Plan area) and the connecting Lough Corrib, which is designated and protected as a Salmonid Water.

4.3.2 Relevant aspects

Information on biodiversity and flora and fauna which is relevant to the Variation and decision making includes available information on designated ecological sites and protected species, ecological connectivity (including stepping stones and corridors) and non-designated habitats.

Ecological designations include:

 Candidate Special Areas of Conservation³ (cSACs) and Special Protection Areas⁴ (SPAs);

³ cSACs 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) by the Department of Culture, Heritage and the Gaeltacht due to their conservation value for habitats and species of importance in the European Union. The sites are *candidate* sites because they are currently under consideration by the Commission of 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.

⁴ 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 - by the Department of Culture, Heritage and the Gaeltacht

- Salmonid Waters⁵ (see Figure 4.5);
- Freshwater Pearl Mussel catchments⁶;
- Flora Protection Order⁷ sites;
- Wildlife Sites (including Nature Reserves⁸);
- Certain entries to the Water Framework Directive Register of Protected Areas⁹, including Nutrient Sensitive Rivers, Salmonid Rivers and Drinking Water Rivers;
- Natural Heritage Areas (NHAs) and proposed Natural Heritage Areas (pNHAs)¹⁰; and
- Wildfowl Sanctuaries (see SI 192 of 1979)¹¹.

due to their conservation value for birds of importance in the European Union.

- ⁵ Salmonid waters are designated and protected as under the European Communities (Quality of Salmonid Waters) Regulations 1988 (SI No. 293 of 1988). Designated Salmonid Waters are capable of supporting salmon (Salmo salar), trout (Salmo trutta), char (Salvelinus) and whitefish (Coregonus).
- ⁶ Freshwater pearl mussel is a globally threatened, long-lived and extremely sensitive species that can be impacted by many forms of pollution, particularly sediment and nutrient pollution and by hydrological and morphological changes, which may arise from developments, activities or changes in any part of the catchment. The Republic of Ireland currently has 19 SACs designated for the pearl mussel covering 27 sub-basins. One of these sub-basins is the Munster Blackwater catchment that holds populations of freshwater pearl mussel, *Margaritifera margaritifera*.
- ⁷ The current list of plant species protected by Section 21 of the Wildlife Act, 1976 is set out in the Flora (Protection) Order, 1999.
- ⁸ A Nature Reserve is an area of importance to wildlife, which is protected under Ministerial order. There are currently 78 Statutory Nature Reserves. Most are owned by the State but some are owned by organisations or private landowners.
- ⁹ In response to the requirements of the Water Framework Directive a number of water bodies or parts of water bodies which must have extra controls on their quality by virtue of how their waters are used by wildlife have been listed on Registers of Protected Areas (RPAs). RPAs include those for Protected Habitats or Species, Shellfish, Salmonid, Nutrient Sensitive Areas, Recreational Waters and Drinking Water.
- 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. pNHAs were published on a non-statutory basis in 1995, but have not since been statutorily proposed or designated. These sites are of significance for wildlife and habitats
- ¹¹ Wildfowl Sanctuaries are areas that have been excluded from the 'Open Season Order' so that game birds can rest and feed undisturbed. There are 68 sanctuaries in the State. Shooting of game birds is not allowed in these sanctuaries.

Protected Species include:

- Annex IV (Habitats Directive) species
 of flora and fauna, and their key
 habitats (i.e. breeding sites and
 resting places), which are strictly
 protected wherever they occur,
 whether inside or outside the above
 sites, e.g. Otter and bats;
- Other species of flora and fauna and their key habitats which are protected under the Wildlife Acts, 1976-2000, wherever they occur; and
- species 'Protected and natural habitats' as defined in the European Liability Directive (2004/35/EC) and European Communities (Environmental Liability) Regulations, 2008, including: Birds Directive -Annex I species and other regularly occurring migratory species, and their habitats (wherever they occur) and Habitats Directive - Annex I habitats, Annex II species and their habitats, and Annex IV species and their breeding sites and resting places (wherever they occur).

Specific habitats and species in specific locations are given consideration through project level planning and associated assessments.

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)¹²;
- Watercourses, wetlands and peatlands;
- The EPA's Framework National Ecological Network for Ireland¹³;

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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. 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.

¹³ 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.

- Other sites of high biodiversity value or ecological importance, e.g. Bird Watch Ireland's 'Important Bird Areas' (Crowe et al., 2009); and
- Native Trees.

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

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

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

4.3.3 Further Detail

4.3.3.1 European Sites

Additional information on European Sites is provided in the AA Natura Impact Report which accompanies the Variation and this Environmental Report.

Figure 4.1 maps European Sites and Water Management Units within 15 km buffer of the Gaeltacht Plan area.

The Zone of Influence of the Variation with respect to potential impacts upon ecology can be estimated to be ecology within this area together with downstream waterbodies within the Western River Basin District (WRBD).

For more detail please refer to the AA Natura Impact Report.

4.3.3.2 Land Cover Mapping

Land cover categories which indicate lands that are likely to be most valuable to biodiversity include broad-leaved forests, natural grassland, moors and heathlands, transitional woodland scrub, peat bogs, stream courses and water bodies.

The CORINE (Co-ordinated Information on the Environment) land cover (CLC) 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 decades, Ireland's landscape predominantly rural and agricultural.

An Cheathrú Rua

Part of the Kilkieran Bay and Islands SAC (Site Code: 002111), Ecological Network Classes, areas of blanket peat surrounding An Cheathrú Rua and WFD River Sub-Basins at the town are mapped on Figure 4.4. CORINE Land Cover Mapping for 2012 indicates peatlands, pastures and land principally occupied by agriculture with areas of natural vegetation surrounding the town (see Figure 4.5).

An Spidéal

Part of the Connemara Bog Complex SAC and pNHA (Site Code: 002034) and part of Moycullen Bogs NHA (Site Code: 002364), Ecological Network Classes, areas of blanket peat to the north of An Spidéal and WFD River Sub-Basins at the town are mapped on Figure 4.6. CORINE Land Cover Mapping for 2012 indicates land principally occupied by agriculture with areas of natural vegetation surrounding the town (see Figure 4.7).

Baile Chláir

Part of the Lough Corrib SAC (Site code: 000297), Ecological Network Classes, an area of cutaway raised bog to the west of Baile Chláir and WFD River Sub-Basins at the town are mapped on Figure 4.8. CORINE Land Cover Mapping for 2012 indicates pastures in

the rural areas surrounding the town (see Figure 4.9).

4.3.3.3 Natural Heritage Areas and Areas likely to contain Annex I Habitats

Natural Heritage Areas, Proposed Natural Heritage areas and Water Management Units within 15 km buffer of the Gaeltacht Plan area are mapped and listed on Figure 4.2. Freshwater Pearl Mussel Sensitive Areas, Shellfish Areas, Nature Reserves and Water Management Units within 15 km buffer of the Gaeltacht Plan area are also mapped on Figure 4.3

4.3.4 Existing Problems

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

The Department of Culture, Heritage and the Gaeltacht Affairs Article 17 report on the Status of EU Protected Habitats and Species in Ireland (2013) identifies many Irish habitats to be of unfavourable status and many to be still declining, although it also identifies that a range of positive actions are underway. The report identifies that the majority of EUprotected species are, however, "Favourable" status in Ireland, and stable, although a small number are considered to be in "Bad" status and continue to require concerted efforts to protect them.

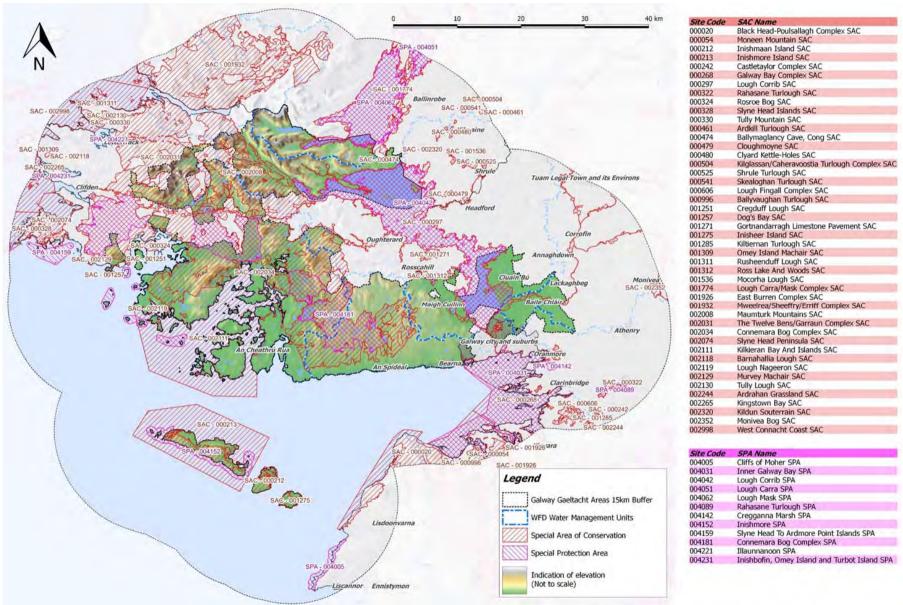


Figure 4.1 European Sites and Water Management Units within 15 km buffer of the Gaeltacht Plan area

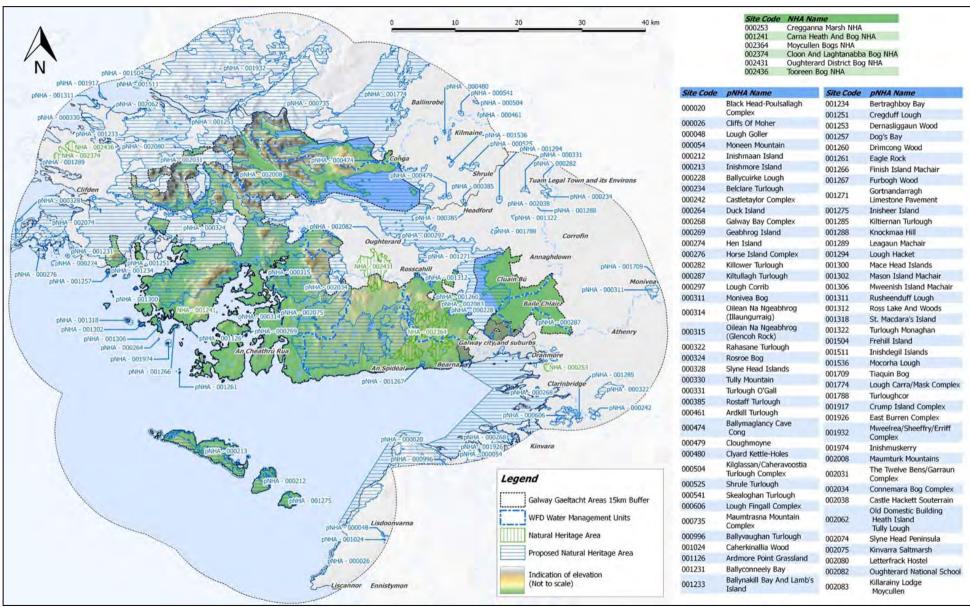


Figure 4.2 Natural Heritage Areas, Proposed Natural Heritage areas and Water Management Units within 15 km buffer of the Gaeltacht Plan area

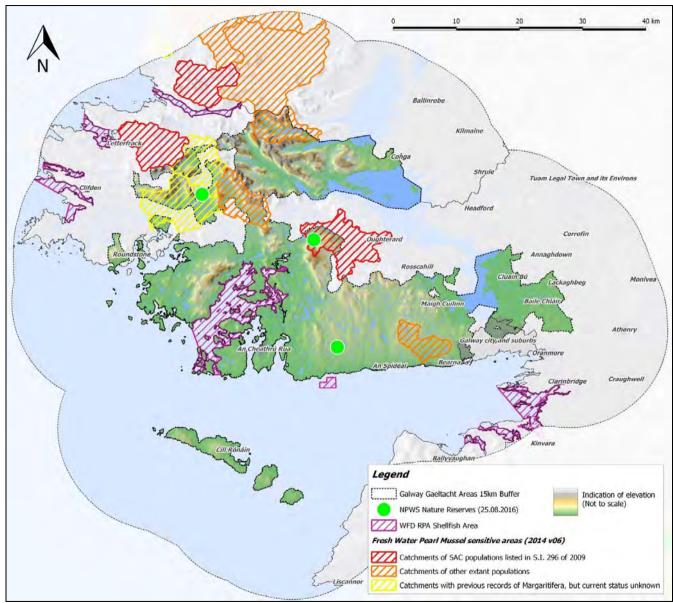


Figure 4.3 Freshwater Pearl Mussel Sensitive Areas, Shellfish Areas, Nature Reserves and Water Management Units within 15 km buffer of the Gaeltacht Plan area

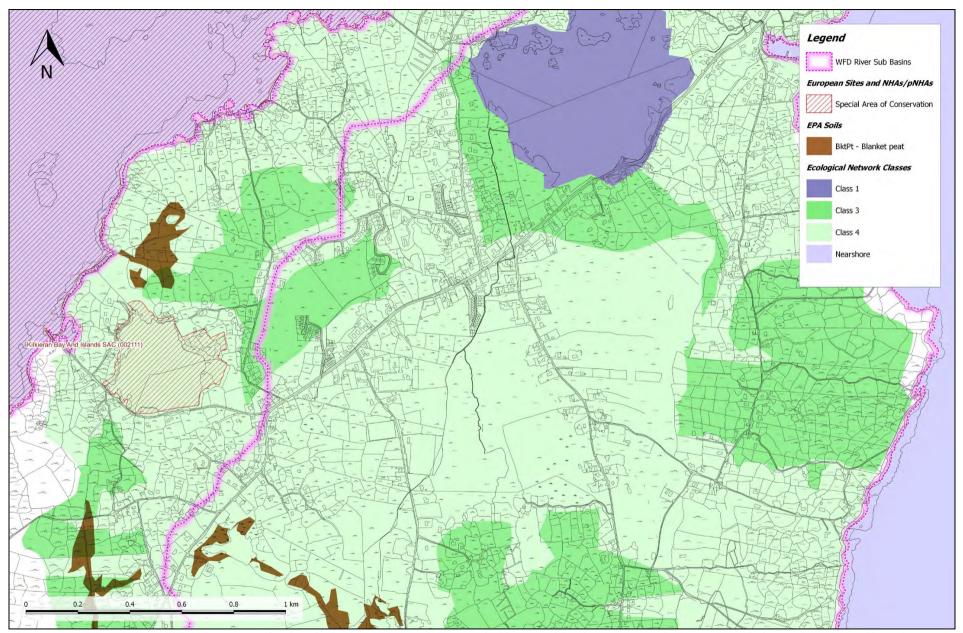


Figure 4.4 Part of the Kilkieran Bay and Islands SAC, Ecological Network Classes, blanket peat and WFD River Sub-Basins at An Cheathrú Rua

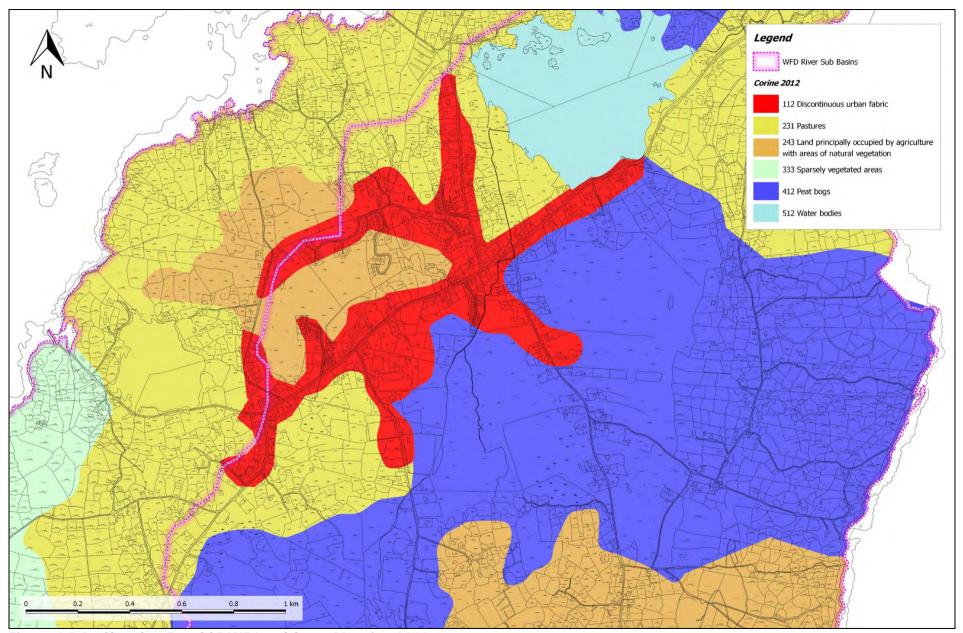


Figure 4.5 An Cheathrú Rua CORINE Land Cover Mapping 2012

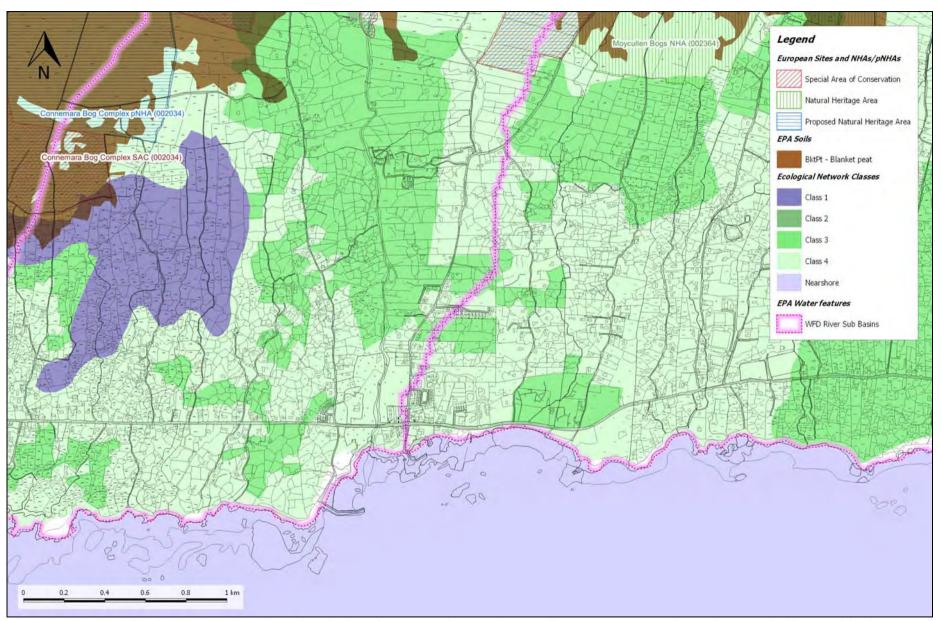


Figure 4.6 Part of the Connemara Bog Complex SAC and pNHA and part of Moycullen Bogs NHA, Ecological Network Classes, blanket peat and WFD River Sub-Basins at An Spidéal

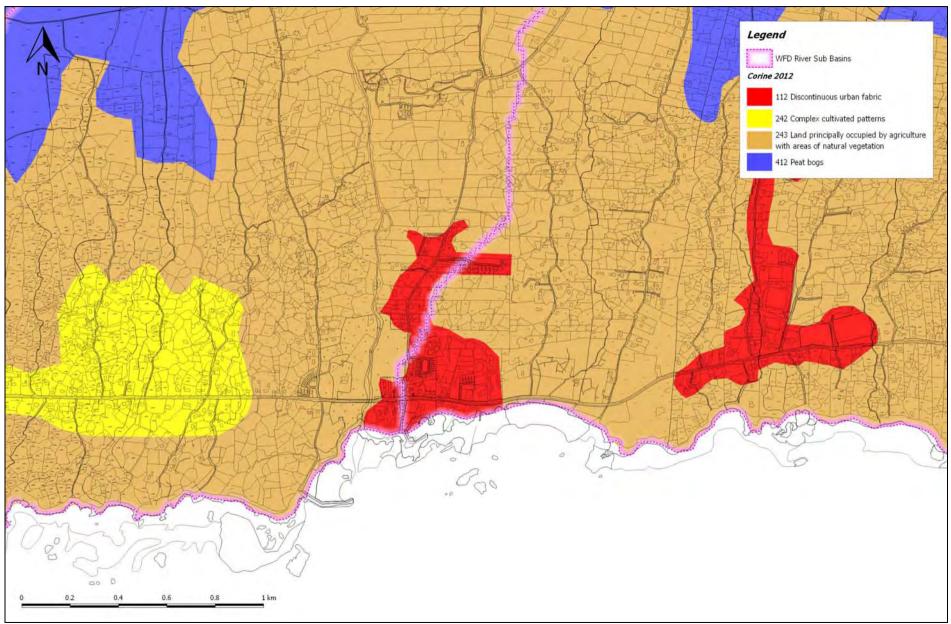


Figure 4.7 An Spidéal CORINE Land Cover Mapping 2012

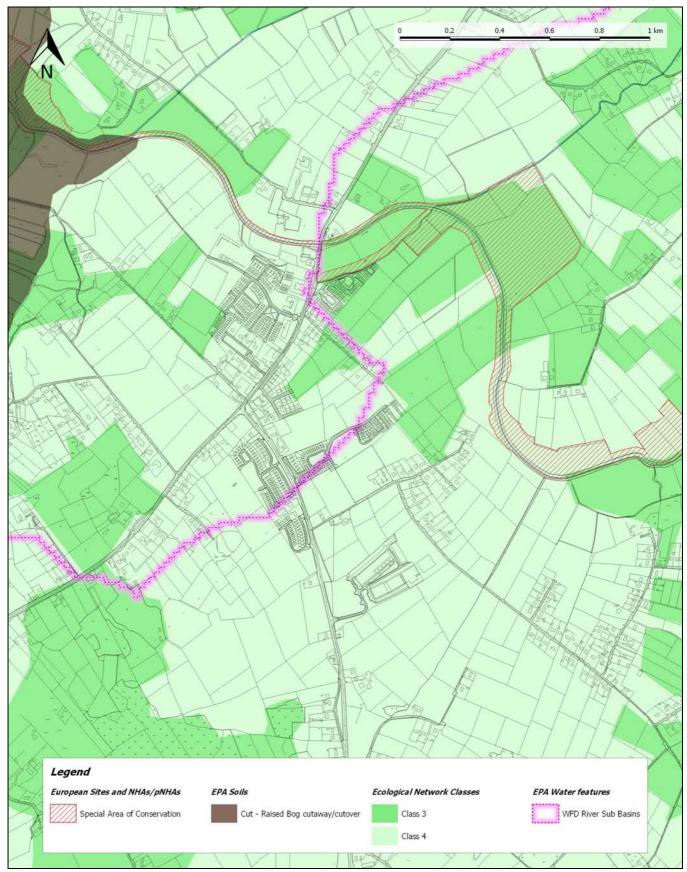


Figure 4.8 Part of the Lough Corrib SAC, Ecological Network Classes, cutaway raised bog and WFD River Sub-Basins at Baile Chláir

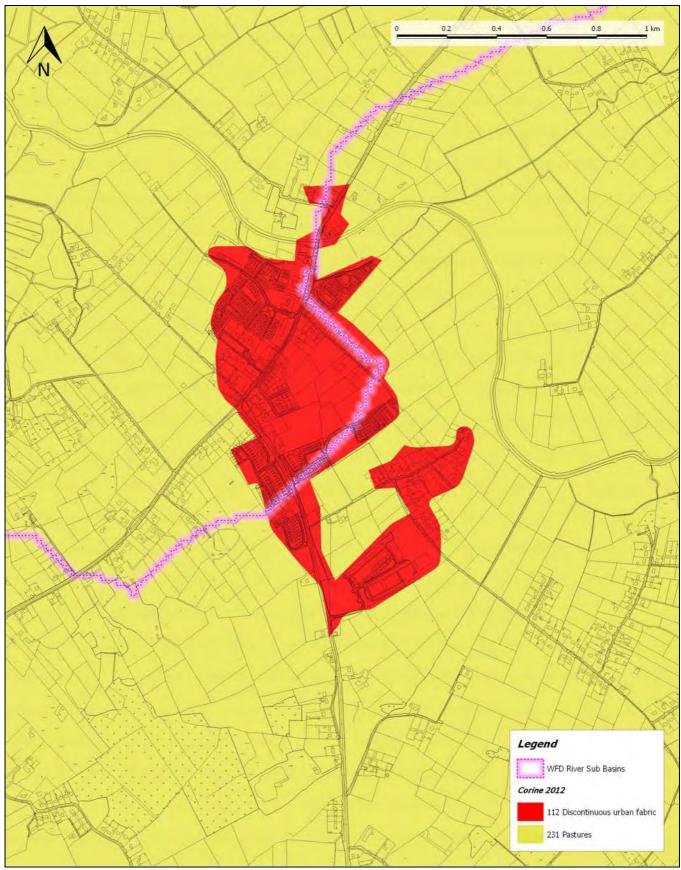


Figure 4.9 Baile Chláir CORINE Land Cover Mapping 2012

4.4 Population and Human Health

4.4.1 Interactions

The impact of implementing Variation 2 (b) on population and human health is influenced by the impacts which the Variation will have upon 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 so that they come into contact with human beings. Population and human health has the potential to interact with issues including the following:

- Developmental and recreational pressure on habitats and landscapes;
- Increase in demand for waste water treatment at the municipal level (see Section 4.8.1.2);
- Increase in demand for water supply (see Section 4.8.1.3);
- Water quality (see Section 4.6); and
- Flood risk (in flood sensitive areas) (see Section 4.6).

The larger Gaeltacht towns and villages near Galway City have experienced significant pressure for development i.e. Baile Chláir, Bearna, Maigh Cuilinn, and An Spidéal. Their population has grown by approximately 50 per cent between 1996 and 2006.

The figures from the 2011 Census show a total of 33,608 persons living in the Electoral Districts of the Galway Gaeltacht in the County functional area. This represents a strong growth of 2,860 additional persons or an increase of 9.3% between 2006 and 2011.

In Census 2016 the population for Gaeltacht na Gaillimhe was recorded at 50,570, however part of this Gaeltacht is in Mayo. The population of the Galway City part of the Gaeltacht was 15,774, the population of the Galway County part of the Gaeltacht was 33,750 and the remainder, 1,046 persons, were in Mayo. Census 2016 population figures were recorded in the electoral divisions as following: Baile Chláir 2,124 persons; An Cheathrú Rua 2,472 persons; An Spidéal 1,443 persons.

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.

4.4.2 Existing Problems

There is historic and predictive evidence of flooding in various locations within the County. Some waterbodies within County Galway are at risk of not meeting the Water Framework Directive's objective of good water quality. There are various water services needs in County Galway, including at An Cheathrú Rua and An Spidéal, which are expected to be addressed over the coming years.

4.5 Soil

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

Soil type in the Gaeltacht Plan area are shown on Figure 4.5 (An Cheathrú Rua), Figure 4.7 (An Spidéal) and Figure 4.9 (Bile Chláir). Peat soils are often indicative of areas that are the most sensitive to development due ecological sensitivities and impeded drainage issues. Peat soils occur to the north-east and north-west of An Spidéal and to the north-east and south of An Cheathrú Rua.

To date, there is no legislation which is specific to the protection of soil resources. However, there is currently an EU Thematic Strategy on the protection of soil which includes a proposal for a Soil Framework Directive which proposes common principles for protecting soils across the EU.

4.5.1 Radon

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.

A High Radon Area is any area where it is predicted that 10 per cent or more of homes will exceed the Reference Level of 200 Becquerel per cubic metre (Bq/m³). The Government's Building Regulations require that all new homes in High Radon Areas are installed with a radon barrier. A high radon level can be found in any home in any part of the country, but these homes are more likely to be located in High Radon Areas.

It is estimated that less than 1 % of homes in An Spidéal, between 1% and 5% in in An Cheathrú Rua and over 20% in Baile Chláir are above the Reference Level. These levels are relatively normal in comparison to those experienced elsewhere within the country (mapping available at http://www.epa.ie/radiation/radonmap).

Objective CC8 from the existing County Development Plan requires the Council to have regard to the specific guidance on radon prevention measures for new homes as contained within the Building Regulations.

4.5.2 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 semiurban areas across the country, there is potential for contamination at sites within County Galway, especially where land uses occurred in the past in the absence of environmental protection legislation.

The Waste Facility (License Number W0013-01) is located to the south west of Baile Chláir. The EPA report¹⁴ indicates that the landfill may be impacting on groundwater and surface water in the vicinity of the landfill. The report listed a number of non-compliance issues Carrowbrowne Landfill Site. within the Instructions and corrective actions arising from the site visit were identified by the EPA inspectors, in order to inform the licensee on improve environmental to the performance to ensure compliance.

4.5.3 Existing Problems

Coastal erosion has resulted in the loss of soil and rock along certain stretches of the Gaeltacht shore in the past and has the potential to result in further losses in the future.

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

Please also refer to Sections 4.5.1 and 4.5.2 above.

¹⁴ Carrowbrowne Landfill Site Visit Report 28.04.2017; EPA 2017;

⁽http://www.epa.ie/licences/lic_eDMS/090151b28061efb6.pdf

4.6 Water

4.6.1 Potential Pressures on Water Quality

Human activities, if not properly managed, can cause deterioration in water quality. Pressures exerted by human activities include the following:

- Sewage and other effluents discharged to waters from point sources, e.g. pipes from treatment plants;
- Discharges arising from diffuse or dispersed activities on land;
- Abstractions from waters; and
- Structural alterations to water bodies.

A point source pressure has a recognisable and specific location at which pollution may originate. Examples of significant point source pressures include direct discharges from waste water treatment plants, licensed discharges from industrial activities, landfills, contaminated lands (e.g. disused gas works) and mines.

A diffuse source pressure unlike a point source is not restricted to an individual point or location. The source of a diffuse pressure can be quite extensive. Significant examples of diffuse pressures include runoff from forestry and agricultural lands.

Excessive abstractions from surface waters and groundwater for drinking and industrial purposes can create pressures on the ability of a water body to maintain both chemical and ecological status.

Structural alterations such as river straightening; construction of embankments, weirs, dams, port facilities and dredging can create conditions such that a water body is no longer able to support the natural ecology which would have existed prior to such modifications. These pressures are also referred to as morphological pressures.

4.6.2 Water Framework Directive

4.6.2.1 Introduction and Requirements

Since 2000, Water Management in the EU has been directed by the Water Framework Directive 2000/60/EC (WFD). The WFD

requires that all Member States implement the necessary measures to prevent deterioration of the status of all waters - surface, ground, estuarine and coastal - and protect, enhance and restore all waters with the aim of achieving *good status*. All public bodies are required to coordinate their policies and operations so as to maintain the good status of water bodies which are currently unpolluted and improve polluted water bodies to good status.

The EU's Common Implementation Strategy Guidance Document No. 20 provides guidance on exemptions to the environmental objectives of the WFD.

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 relevant river basin management plan.

4.6.2.2 River Basin Districts and Water Bodies

The Water Framework Directive is implemented at River Basin Districts (RBD) level. An RBD is an area of land that is drained by a large river or number of rivers and the adjacent estuarine/coastal areas. For the first cycle of River Basin Management Plans were prepared for 8 RBDs on the island of Ireland.

Following a review of the first cycle of RBMPs, the Department of Communications, Climate Action and Environment determined that, in the interest of efficiency, there will be a single national approach to the development of RBMPs for the second cycle and that the Eastern, South Eastern, South Western, Western and Shannon River Basin Districts will be merged to form one national River Basin District. In relation to the North Western and Neagh Bann International River Basin Districts, a single administrative area will be established in the South for the purpose of coordinating water management with authorities in Northern Ireland.

WFD Monitoring Programmes are undertaken in Ireland by the EPA. Overviews of the status

for monitored waterbodies are published on an ongoing basis and are made available online. Up-to-date, detailed information with respect to relevant water bodies will, as is normal practice, inform lower tier project assessments and design.

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

4.6.3 Surface Water

4.6.3.1 Introduction

The Zone of Influence of the Variation beyond the Gaeltacht area with respect to impacts upon waters can be estimated to be all bodies of groundwater and all surface waters downstream areas of catchments¹⁵ which drain the County.

4.6.3.2 WFD Surface Water Status

The WFD defines *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, to achieve *good surface water status* both the ecological status and the chemical status of a surface water body need to be at least *good*.

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

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

There is a data gap relating to WFD surface water status data for certain waterbodies and these are identified as *unassigned*¹⁶ when it comes to WFD status 2010-2015. Water quality status for surface water bodies across the Gaeltacht area is indicated on Figure 4.10. Most surface water bodies within or adjacent to the Gaeltacht area are identified as being of *high* or *good* status. The Lower Loch Corrib is identified as being of *moderate* status as are a number of rivers and lakes. Water quality status for each of the settlements with land uses provided for by the Variation is indicated on Figure 4.11, Figure 4.13 and Figure 4.15.

An Cheathrú Rua

Lake Loch An Mhuillin to the north of the settlement is of a *good* status, meeting the objectives of the WFD. The stream flowing through the centre of the town (An Cheathrú Rua South) is of *unassigned* status. The coastal water body to the east of the town is identified as being of *high* status, to the west of the town it is identified as being of *unassigned* status. Loch Scailpdonail is not assigned any classification. The WFD status of surface waters within and surrounding An Cheathrú Rua is mapped on Figure 4.11.

An Spidéal

An Spidéal is located between two river catchments: Owenboliska to the east and Sheeaunroe to the west. WFD status (2010-2015) is *good* for the River Owenboliska to the west of the town and *unassigned* for the River An Spidéal River to the east of the town. The coastal water body to the south of the town is identified as being unassigned. The WFD status of surface waters within surrounding An Spidéal is mapped on Figure 4.13. In 2016, bathing water quality at Céibh an Spidéil was identified as being of good quality while bathing water quality at Trá na mBan was identified as being of moderate quality.

Baile Chláir

The status of the River Clare varies in the Plan area: it is identified with *moderate* status to the west of Baile Chláir Bridge in the town and it is identified as *unassigned* to the west of Baile Chláir Bridge in the town. WFD Lake Waterbody Status (2010-2015) of the Corrib Lake Lower, located to the east of the settlement is identified as being of a *moderate* status (see Figure 4.15).

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.

¹⁶ Ecological status is not assigned and the term *unassigned status* applies in respect of these waterbodies.

4.6.4 Ground Water

4.6.4.1 Introduction

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.

4.6.4.2 WFD Groundwater Status

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 (2010-2015) of all groundwater underlying the Gaeltacht (including An Cheathrú Rua, An Spidéal and Baile Chláir) and surrounding areas is generally identified as being good, meeting the objectives of the WFD. However, an area underlying a Waste Facility (License Number W0013-01) to the south west of Baile Chláir is identified as being of poor status. An area close to Oranmore (Industrial Facility IPPC License Number P0056-01) is also identified as being of *poor* status.

4.6.4.3 Aquifer Vulnerability and Productivity

The Geological Survey of Ireland (GSI) rates the rocks, or aquifers, that contain groundwater according to both their vulnerability to pollution and their productivity.

Aquifer vulnerability is a term used to represent the intrinsic geological and hydrogeological characteristics that determine the ease with which groundwater may be contaminated by human activities. Aquifer vulnerability is based on the type and thicknesses of subsoils (sands, gravels, glacial tills (or boulder clays), peat, lake and alluvial silts and clays), and the presence of karst features. Groundwater is most at risk where the subsoils are absent or thin and, in areas of

karstic limestone, where surface streams sink underground at swallow holes¹⁷.

Most aquifers underlying An Cheathrú Rua, Baile Chláir and An Spidéal are identified as having *extreme* or *extreme* (*rock near surface*) vulnerability (see Figure 4.12, Figure 4.14 and Figure 4.16).

The GSI rates aquifers based on aquifer productivity - hydrogeological characteristics and the value of the groundwater resource. Ireland's entire land surface is divided into nine aquifer productivity classifications that encompass various types of regionally, locally important and poor aquifers. The aquifer underlying Baile Chláir is regionally important (karstified bedrock dominated by conduit flow), while aquifers underlying An Cheathrú Rua and An Spidéal are identified as poor aquifers.

4.6.4.4 Source Protections Areas

Source Protection Area delineation provides an assessment of the land area that contributes groundwater to a borehole or spring. Source reports have been undertaken by the GSI on behalf of Local Authorities since the mid-1990s. Since then, more than 120 have been completed. There is no source protection area located within or in vicinity of the Plan area.

4.6.5 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).

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¹⁷ Source: Geological Survey of Ireland (2014) Metadata

Entries to the RPAs within the Gaeltacht area include:

- The water bodies within and surrounding the Gaeltacht Plan area supporting Special Areas of Conservation (SACs) and Special Protection Areas (SPAs);
- River Corrib as Salmonid River Regulations (SI 293 only), Groundwater and Surface Waters in Salmonid Regulations;
- Groundwater for drinking water underlying the whole Gaeltacht Plan area; and
- Lakes and Rivers for Drinking Water (Lake Corrib, River Corrib, Lake Loughaunnillan).

4.6.6 Flooding

Flooding is an environmental phenomenon which can have adverse impacts upon human health, the economy and our society. The existence of flood risk within Gaeltacht area can be illustrated by historical information on the locations and/or extents of known flooding events. A Strategic Flood Risk Assessment (SFRA) has been undertaken for the settlements within the Gaeltacht Plan that are provided with land use zoning - An Cheathrú Rua, An Spidéal and Baile Chláir. The SFRA has facilitated the integration of flood risk management considerations into both the land use zoning and written provisions contained within the Plan. The most significant source of flood risk within the Gaeltacht Plan area is from fluvial (from rivers/streams) and coastal sources however there are other sources of flooding present including those from pluvial (from rainwater) and surface drainage systems.

There are three types or levels of flood zones defined for zones of elevated fluvial and coastal flood risk for the purposes of the Flood Guidelines (Figure 4.17, Figure 4.18 and Figure 4.19):

- Flood Zone A where the probability of flooding from rivers and the sea is highest (greater than 1% or 1 in 100 for river flooding or 0.5% or 1 in 200 for coastal flooding);
- 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.

4.6.7 Existing Problems

Subject to exemptions provided for by Article 4 of the WFD¹⁸, based on available data on the status of waters within the Variation area, certain surface water bodies within the Variation area will need improvement in order to comply with the objectives of the WFD.

There is evidence of flooding in various locations across the Gaeltacht area.

Coastal erosion has resulted in the loss of soil and rock along certain stretches of the shore in the past and has the potential to result in further losses in the future. Inundation caused by rising sea levels would result in the loss of land together with any developments, infrastructure or habitats located on such lands.

¹⁸ 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 relevant river basin management plan.

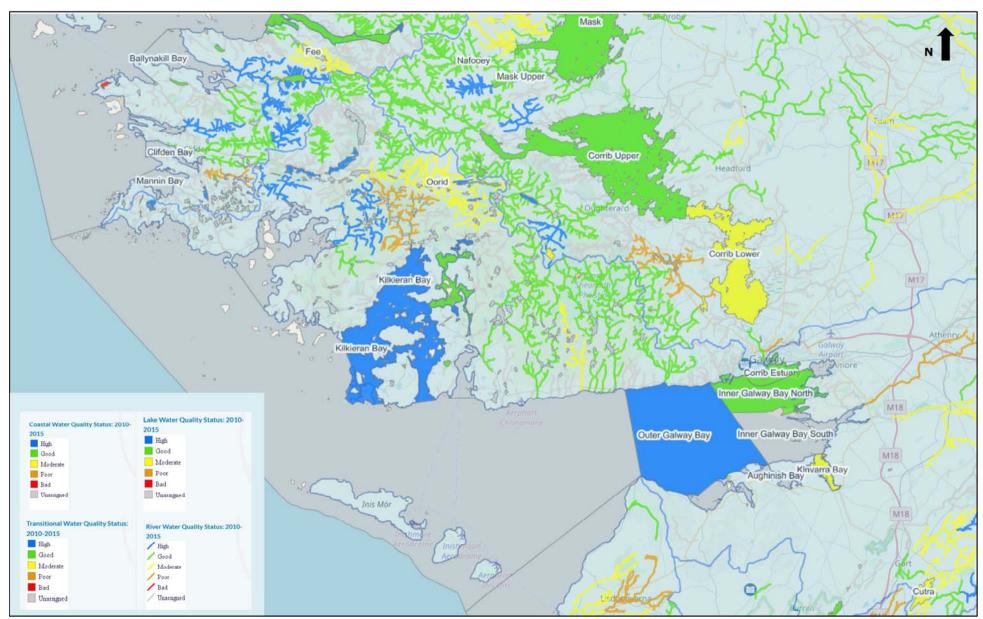


Figure 4.10 Available information on Water Quality Status (2010-2015) for Surface Water Bodies Source: https://www.catchments.ie/maps/

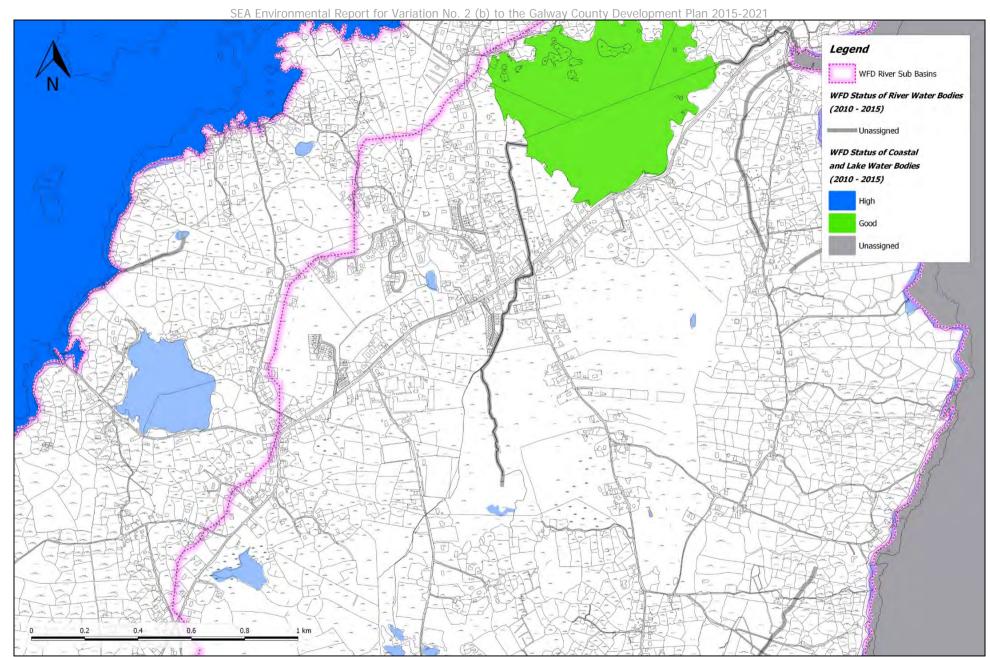


Figure 4.11 An Cheathrú Rua: Available information on Water Quality Status (2010-2015) for Surface Water Bodies

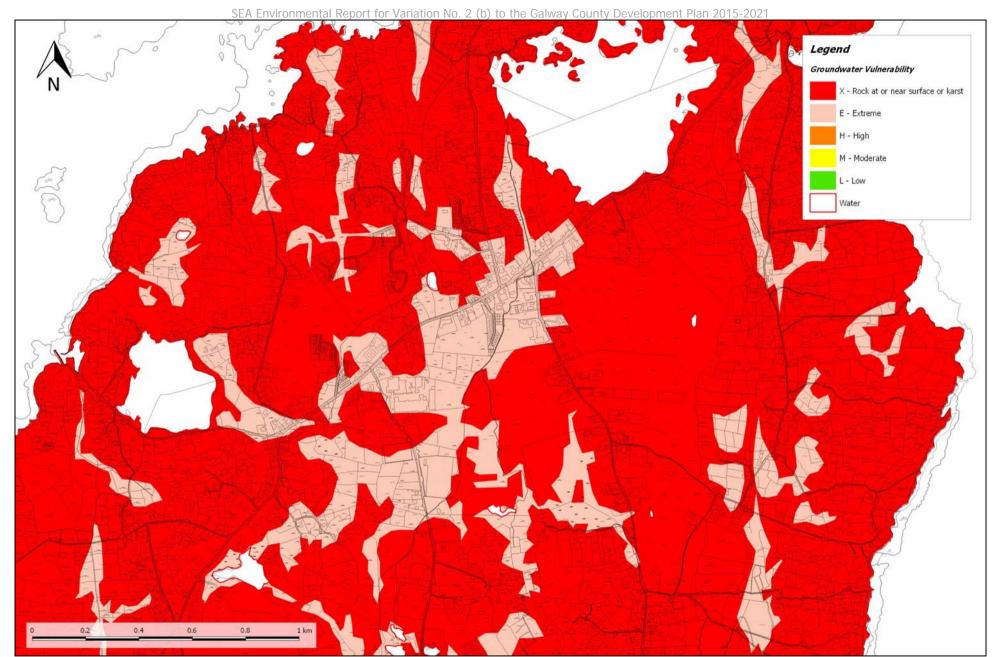


Figure 4.12 An Cheathrú Rua: Groundwater Vulnerability

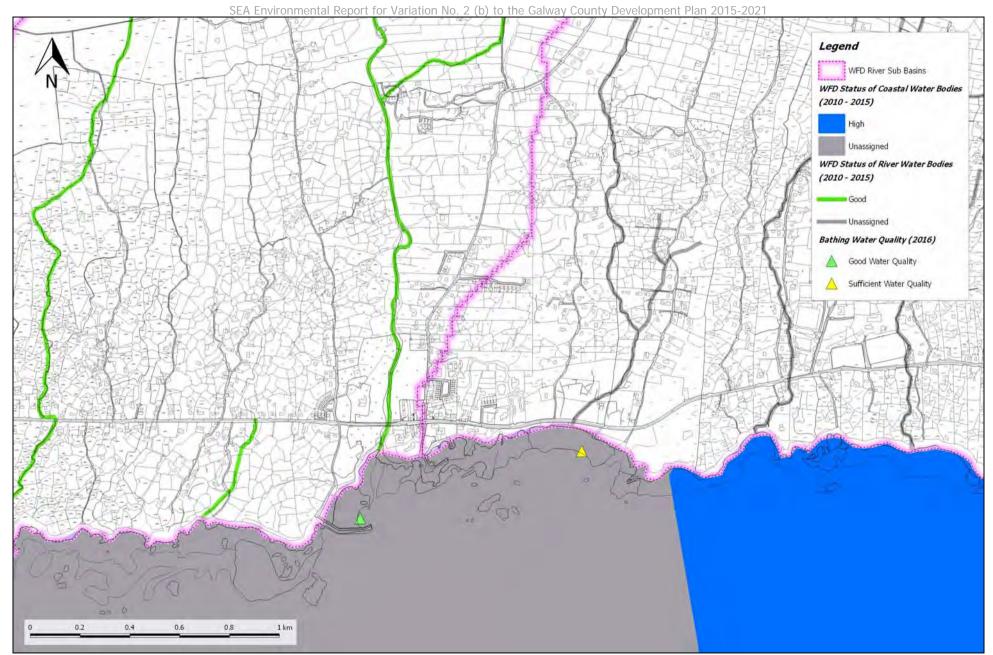


Figure 4.13 An Spidéal: Available information on Water Quality Status (2010-2015) for Surface Waters and Bathing Water Quality

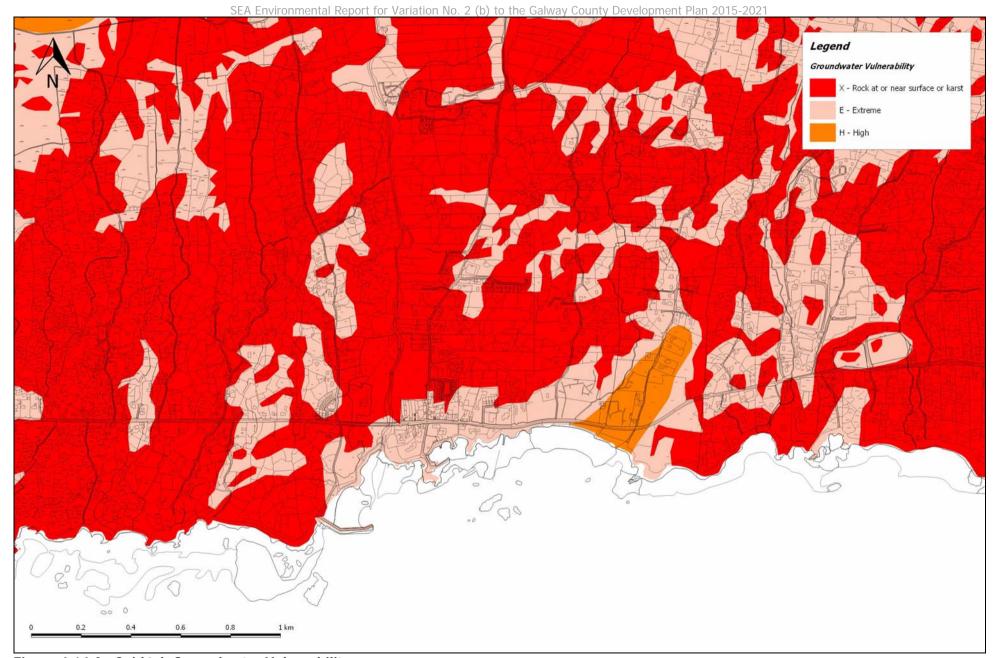


Figure 4.14 An Spidéal: Groundwater Vulnerability

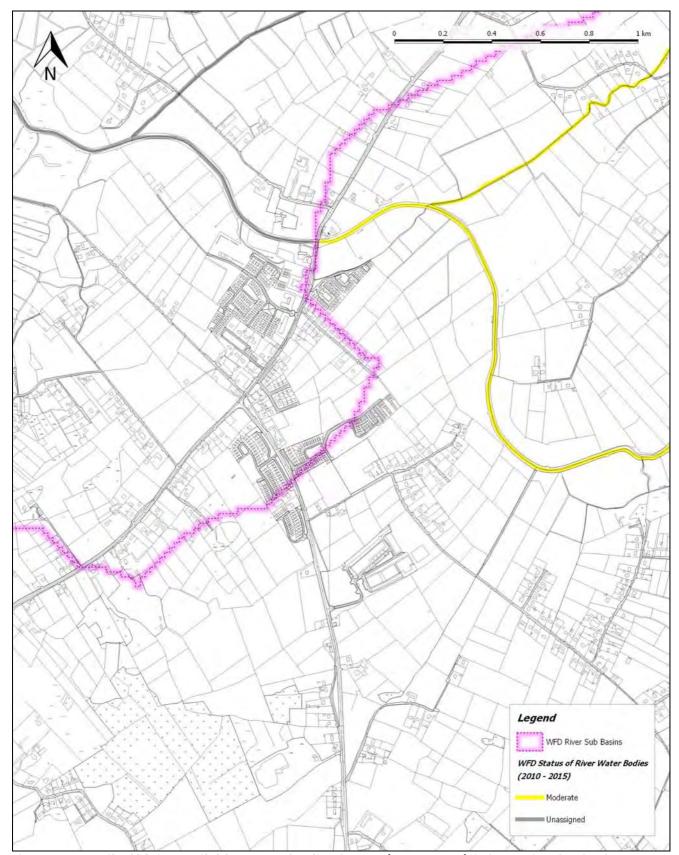


Figure 4.15 Baile Chláir: Available Water Quality Status (2010-2015) information for Surface Water

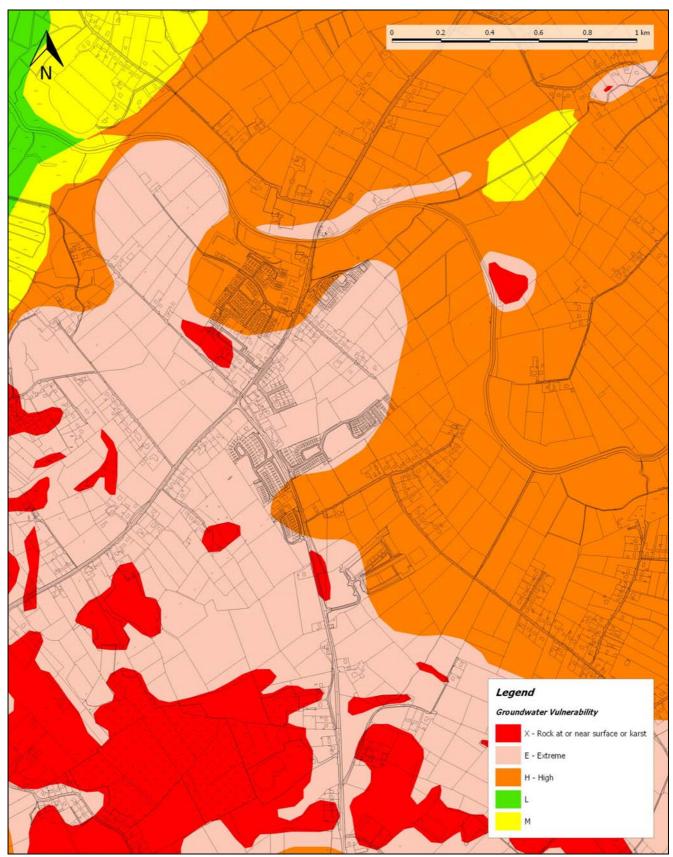


Figure 4.16 Baile Chláir: Groundwater Vulnerability

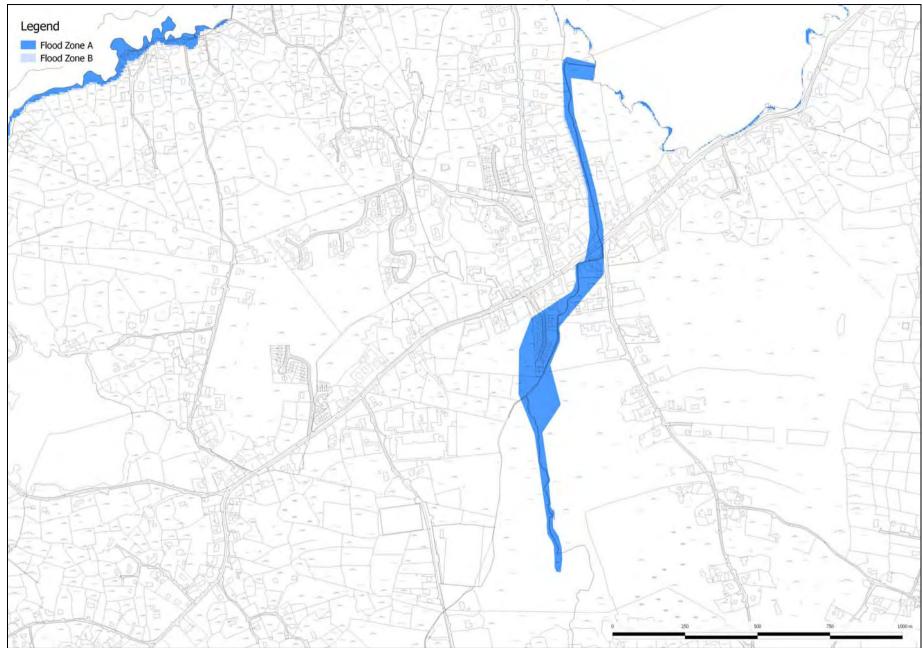


Figure 4.17 An Cheathrú Rua: Flood Zones (fluvial and coastal)

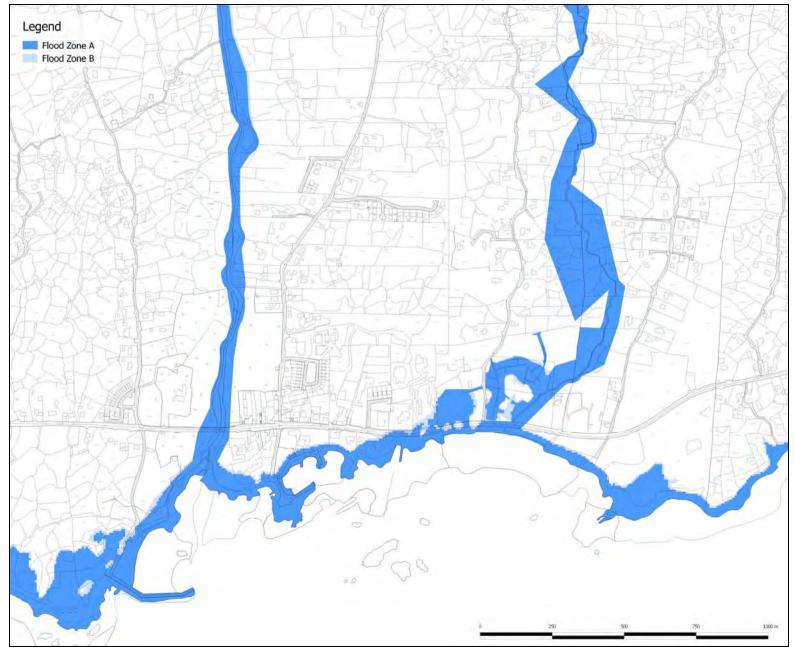


Figure 4.18 An Spidéal: Flood Zones (fluvial and coastal)

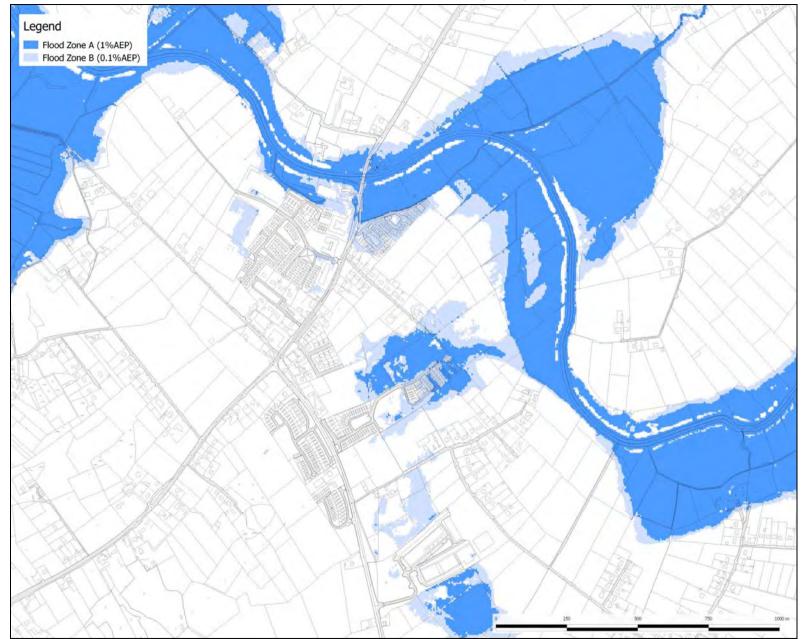


Figure 4.19 Baile Chláir: Flood Zones (fluvial and coastal)

4.7 Air and Climatic **Factors**

4.7.1 Climatic Factors

The key issue involving the assessment of the effects of implementing the Variation on climatic factors relates to greenhouse gas emissions arising from transport. Interactions are also present with flooding (see Section 4.6.6) and these are covered in greater detail in the Strategic Flood Risk Assessment that also accompanies the Variation.

The Variation contributes towards improvements in sustainable mobility, thereby facilitating and reductions in limiting increases greenhouse gas emissions. Such emissions would occur otherwise with higher levels of motorised transport and associated traffic. particularly relevant through the accommodation of new development, including consolidation, within each of the settlements that are provided with land use zoning by the Variation. Land-use planning contributes to what number and what extent of journeys occur. By addressing journey time through land use planning and providing more sustainable modes and levels of mobility, noise and other emissions to air and energy use can be minimised. Furthermore, by concentrating populations, greenfield development - and its associated impacts - can be minimised and the cost of service provision can be reduced.

Flooding - see Section 4.6.6 - is influenced by climatic factors.

Ireland's emissions profile has changed considerably since 1990, with the contribution from transport more than doubling and the share from agriculture reducing since 1998. Travel is a source of:

- 1. Noise:
- 2. Air emissions; and
- 3. Energy use (42.2% of Total Final Energy Consumption in Ireland in 2015 was taken up by transport, the largest take up of any sector)¹⁹.

total national greenhouse 2015, emissions are estimated to be 3.7% higher than emissions in 2014. This follows the 0.3%

¹⁹ Sustainable Energy Ireland (2016) Energy in Ireland 1990 -2015

decrease in emissions reported for 2014, most likely attributable to a mild winter in that year. Emission reductions have been recorded in 8 of the last 10 years, however this has largely been as a result of reduced economic activity. There is now strong evidence that emissions are once again increasing in line with economic and employment growth, particularly in the Transport sector. Greenhouse gas emissions from the Transport sector increased by 4.2% in 2015. This is the third successive year of increases in transport emission. Greenhouse gas emissions in 1990 and 2015 by sector show a more than doubling of the proportion of emissions from the Transport sector, from 9.2% in 1990 to 19.8% in 2015^{20} .

The EPA 2017 publication Ireland's Greenhouse Gas Emission Projections 2016-2035 provides an assessment of Ireland's progress towards achieving its emission reduction targets set down under the EU Effort Sharing Decision (Decision No 406/2009/EC) for the years 2013-2020 and a longer term assessment based on current projections. Ireland's 2020 target is to achieve a 20% reduction of non-Emission Trading Scheme (non-ETS) sector emissions (i.e. agriculture, transport, the built environment, waste and nonenergy intensive industry) on 2005 levels with annual limits set for each year over the period 2013-2020. The EPA has produced two scenarios greenhouse preparing gas emission projections; a With Existing Measures scenario and a With Additional Measures scenario. For 2017 projections, the With Additional Measures scenario takes into account an expected shortfall in achieving full energy efficiency targets and renewable targets for electricity, transport and heat as set out in the National Energy Efficiency Action Plan and National Renewable Energy Action Plan. To assess progress towards achieving reduction targets out to 2020 the EPA is using legislative limits (for the period 2013-2016) and estimated annual limits (for the period 2017-2020) which will possibly be included in a European Commission proposal that takes into account methodological changes underpinning greenhouse gas emission inventories. The 2017 publication identifies that:

- For 2020 it is estimated that non-ETS sector emissions are projected to be 4% - 6% below 2005 levels by 2020. This compares to the target of 20% below 2005 levels by 2020.
- To determine compliance under the Effort Sharing Decision. any

²⁰ EPA (2017) *Ireland's Greenhouse Gas Emissions in 2015*

overachievement of the binding emission limit in a particular year (in the period 2013 to 2020) can be banked and used towards compliance in a future year. Under both scenarios Ireland is expected to exceed the annual limit in 2016.

- Under the With Existing Measures Ireland is projected to scenario, cumulatively exceed its obligations by 13.7 Mt of CO_{2eq} over the period 2013-2020. Under the With Additional Measures scenario, Ireland is projected to cumulatively exceed its obligations by 11.5 Mt of CO_{2eq} over the period 2013-2020. This takes into account the overachievement of the annual limits in the period 2013-2015 which is banked and used in the years 2016-2020. Using this mechanism Ireland is projected to cumulatively exceed its obligations in 2019.
- Agriculture and transport dominate non-ETS sector emissions; emission trends from these sectors will be key determinants in terms of meeting targets with both projected to increase in the period to 2020.

There will be new obligations (as yet undefined) for the years 2021-2030. Based on current emission projections, it is estimated that by 2030 total non-ETS emissions will be 1%-3% below 2005 levels. The estimates of greenhouse gas emissions to 2035 assume a continuation of the effect of policies and measures that are in place in 2020.

The first National Mitigation Plan 2017, prepared by the Department of Communications, Climate Action and Environment, represents an initial step to set Ireland on a pathway to achieve the level of decarbonisation required. It is a whole-of-Government Plan, reflecting in particular the central roles of the key Ministers responsible for the sectors covered by the Plan – Electricity Generation, the Built Environment, Transport and Agriculture, as well as drawing on the perspectives and responsibilities of a range of other Government Departments.

The objectives of the National Climate Change Adaptation Framework 2018 relating to climate adaptation will replace those provided for in the 2012 National Climate Change Adaptation Framework. The objective of the framework is to reduce the vulnerability of the country to the negative effects of climate change and to avail of positive impacts.

4.7.2 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).

The CAFE 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; and
- 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.

The CAFE Directive was transposed into Irish legislation by the Air Quality Standards Regulations 2011 (SI No. 180 of 2011). It replaces the Air Quality Standards Regulations 2002 (SI No. 271 of 2002), the Ozone in Ambient Air Regulations 2004 (SI No. 53 of 2004) and SI No. 33 of 1999.

The fourth Daughter Directive was transposed into Irish legislation by the Arsenic, Cadmium, Mercury, Nickel and Polycyclic Aromatic Hydrocarbons in Ambient Air Regulations 2009 (SI No. 58 of 2009).

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. For the purposes of monitoring in Ireland, four zones are defined in the Air Quality Standards Regulations 2002 (SI No. 271 of 2002). The main areas defined in each zone are:

- Zone A: Dublin Conurbation.
- Zone B: Cork Conurbation.
- Zone C: Other cities and large towns including Limerick, Galway, Waterford, Drogheda, Dundalk, Bray, Navan, Ennis, Tralee, Kilkenny, Carlow, Naas, Sligo, Newbridge, Mullingar, Wexford, Letterkenny, Athlone, Celbridge, Clonmel, Balbriggan, Greystones, Leixlip and Portlaoise.
- Zone D: Rural Ireland, i.e. the reminder of the State – small towns and rural areas of the country – excluding Zones A, B and C.

The Mace Head air quality monitoring site is located within the Gaeltacht area. The Bodkin Roundabout air quality monitoring site is located close to the Gaeltacht in Galway City. The current air quality at these sites is identified by the EPA as being $good^{21}$.

The EPA's (2017) Air Quality in Ireland 2016 identifies that:

- No levels above the EU limit value were recorded at any of the ambient air quality network monitoring sites in Ireland in 2016;
- WHO guideline values were exceeded at a number of monitoring sites for particulate matter (PM₁₀ and PM_{2.5}), ozone, SO₂ and NO₂; and
- 2016 dioxin survey shows that concentrations of dioxins and similar pollutants remain at a consistently low level in the Irish environment.

With regard to challenges, the report identifies that maintaining our standard of air quality in Ireland is a growing challenge. Overcoming this challenge is taking on an increased importance with the further understanding of the links between poor air quality and human health. The European Environment Agency (EEA) have estimated a figure of 1,510 premature deaths in Ireland in 2014 (EEA 2017) directly attributable to air quality, with the predominant culprit being fine particulate matter (PM_{2.5}) from the use of solid fuels such as wood, coal and peat for home

heating. It is becoming increasingly apparent that there is no safe level of air pollution, a position that is held by the WHO and is reflected in their much stricter (than EU limit values) air quality guideline values. The clear benefits in terms of health improvements of reducing the people's exposure to poor air quality is also supported by significant economic savings in doing so. This is highlighted by the Organisation for Economic Co-operation and Development's (OECD) report on the economic cost of air pollution (OECD 2016).

With regards to solutions, the report identifies the following that the implementation of the new Ambient Air Quality Monitoring Programme (AAMP) by the EPA will be key to tackling the issues surrounding air quality in Ireland. The two key sectors that predominantly impact negatively on air quality are residential heating and transport. The AAMP seeks to address these key issues by firstly informing the public on the status of air quality in Ireland. This will be achieved through an expansion of the monitoring network with a greater emphasis on provision of real-time particulate matter levels. In conjunction with this network expansion, the AAMP will implement a programme of citizen engagement which will be used to highlight the links between air quality, health and the actions or clean air choices that can be taken by citizens to directly impact and improve their local air quality. Namely these are -

- Any shift from the burning of solid fuel to cleaner, more energy efficient methods of home heating which will result in cleaner air quality for the consumer, their family and neighbours with a resultant improvement in their health.
- A transition in our modes of transport away from the use of the private diesel and petrol powered motor cars to alternative modes of transport such as walking, cycling and forms of transport that are environmentally friendly and sustainable such as electric motor powered vehicles. This is especially important in our at-risk urban environments.

To incentivise and compliment these behavioural changes in the public, the report identifies that it is imperative that Ireland adopts policy solutions that can marry the twin issues of ambient air quality and climate change mitigation. The government's 'Clean Air Strategy' which is due for publication should point the way forward in terms of policy solutions for Ireland in this regard.

²¹ 06/2018 (http://www.epa.ie/air/quality/)

4.7.3 Existing Problems

Legislative objectives governing air and climatic factors were not identified as being conflicted with in the Plan area however there are national targets regarding greenhouse gas emissions and air quality that are in danger of not being met.

4.8 Material Assets

4.8.1 Water Services

4.8.1.1 Irish Water

Since January 2014, Irish Water is the State body responsible for the delivery, integration and implementation of strategic water and waste water projects and infrastructural improvements. Galway County Council no longer has a direct role in this area, however the Council works with Irish Water to help to ensure that the land use plans and water services investment plans align.

The function and role of Irish Water includes:

- Abstracting and treating water;
- Delivering water and waste water services to homes and businesses;
- Installing water meters and billing domestic and business customers;
- Raising finance to fund improvements and repairs in the water system; and
- Maintaining and operating the water system.

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.

4.8.1.2 Waste water Services Demand and Capacity Information

The EPA's 2017 report 'Urban Waste Water Treatment in 2016' identified that:

- Waste water treatment at 50 of Ireland's 185 large urban areas did not meet relevant standards and improvements are needed at 148 urban areas;
- Raw sewage is released into the environment from 44 urban areas; and
- Significant capital investment to upgrade deficient waste water treatment systems is required to comply with EU standards, improve water quality, and prevent

pollution of rivers, lakes and bathing water and to protect shellfish and pearl mussel habitats.

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. There are 14 urban areas in County Galway listed currently as priority areas, where improvements are required to resolve urgent environmental issues. Three of the listed urban areas in County Galway are identified to be nonthe secondary compliant with treatment requirements and three areas are discharging untreated sewage (see Table 4.1). The report lists An Cheathrú Rua and An Spidéal as priority areas where improvements are required to resolve environmental priorities.

The existing sewerage scheme at An Cheathrú Rua outfalls to sea. A Concept Design Report is being prepared as a part of a national bundle of schemes discharging to sea. There is no programme for delivery yet.

The existing sewerage scheme at An Spidéal consists of a small collection system with a sea outfall discharging untreated sewage in the vicinity of a public bathing areas. A Concept Design Report is being prepared as a part of a national bundle of schemes discharging to sea. There is no programme for delivery yet.

A Sewage Scheme has been completed for Baile Chláir in 2016 with capacity for 6,000 population equivalent²². There is currently adequate capacity in the waste water infrastructure.

4.8.1.3 Drinking Water

Drinking water must be clean and wholesome. That means it must meet the relevant water quality standards and must not contain any other substance or micro-organism in concentrations or numbers that constitute a potential danger to human health.

Compliance with the drinking water requirements is determined by comparing the results of analyses submitted by water suppliers to the standard for 48 parameters specified in the European Communities (Drinking Water)

22

²² Population equivalent is defined in the Regulations as 'a measurement of organic biodegradable load and a population equivalent of 1 (1 p.e.) means the organic biodegradable load having a five-day biochemical oxygen demand (BOD5) of 60g of oxygen per day'.

Regulations (No. 2), 2007. To ensure that these standards are met, each water supply must be monitored on a regular basis.

Under Section 58 of the Environmental Protection Agency (EPA) Act 1992 the EPA is required to collect and verify monitoring results for all water supplies in Ireland covered by the European Communities (Drinking Water) Regulations. 2000. The EPA publishes their results in annual reports which are supported by Remedial Action Lists (RALs). The RAL identifies water supplies which are not in compliance with the Regulations mentioned above. The current RAL (Q1 of 2018) lists two water supply schemes in County Galway (Ballinasloe and Williamstown water supplies) for elevated levels of THMs above the standard in the Drinking Water Regulations. Drinking water supply schemes in An Spidéal, An Cheathrú Rua and Baile Chláir are not listed on the current RAL.

An Cheathrú Rua's water supply has adequate capacity in the short term. The Galway Regional Water Supply Scheme will extend Galway City supply to An Cheathrú Rua in the future.

The source of the water supply to An Spidéal is Both Loiscithe Lough. The water scheme provides a good quality supply to the village and an extensive surrounding area and currently has adequate capacity. It is planned that extensive water distribution network rehabilitation on the water scheme is undertaken.

There is currently adequate capacity in the drinking water infrastructure in Baile Chláir.

4.8.2 Waste Management

For the purposes of waste management planning, Ireland is divided into three regions: Southern, Eastern-Midlands and Connacht-Ulster. Waste management plans for the three regions came into force in 2015. Galway is subject to the Connacht Ulster Waste Management Plan 2015-2021.

The EPA publishes data on waste generation and management in the National Waste Report and bulletins. The most recent National Waste Report was published in August 2014, reporting waste information for 2012, identified that in 2012, Ireland achieved all its EU obligations across a broad range of waste legislation.

4.8.3 Existing Problems

There are a number of issues with respect to water services requirements within the Plan area that are detailed above.

Urban Waste Water Treatment in County Galway in 20161

Urban area	Priority areas ²	Non-compliant with secondary treatment requirements ³	Areas discharging untreated sewage ⁴	Pressure on water bodies ⁵	Waste water contributing to poor quality bathing water ⁶
Ahascragh	1		1		
Atherny	1	~		(Clarinbridge_030, Clarinbridge_040)	
Ballymoe	~			(Island_030)	
Carraroe	✓		1		
Clifden	1				(Clifden Beach)
Galway City	*				(Ballyloughane Beach)
Glenamaddy	~	ļ .	j	(Gortgarrow Stream_010)	(Con) Cognitive Descrip
Gort	1	V			
Loughrea	~			√ (Kilcolgan_020)	
Mountbellew	~			(Castlegar_020)	
Oughterrard	✓	✓		(======================================	
Roundstone	✓		✓		
Spiddal	✓		✓		
Woodford	√			√ (Woodford Galway _020)	

¹ Based on *Urban Waste Water Treatment in 2016* report, published by the Environmental Protection Agency in 2017.

Table 4.1 Urban Waste Water Treatment in County Galway in 2016

² This column lists urban areas in County Galway where improvements are required to resolve environmental priorities.

³ This column lists urban areas in County Galway that failed to meet the EU's legally binding standards for treatment of urban waste water.

⁴ This column lists urban areas in County Galway discharging untreated sewage, below the Directive's thresholds for the mandatory provision of secondary treatment (the thresholds are 2,000 PE for discharges to freshwater and estuaries and 10,000 PE for discharges to coastal waters).

⁵ This column lists areas where waste water discharges are identified as the sole pressure on water bodies at risk of not meeting their environmental objectives. The number at the end of each river water body indicates where the water body is located along the main river channel (for example: _010 indicated the water body downstream, the next water body downstream is _020 and final before it becomes transitional is _240).

⁶ This column lists urban areas, where waste water discharges were contributing factors to the poor quality of the bathing waters.

4.9 Cultural Heritage

4.9.1 Archaeological Heritage

4.9.1.1 Introduction

Archaeology is the study of past societies through the material remains left by those societies and the evidence of their environment. Archaeological heritage consists of such material remains (whether in the form of sites and monuments or artefacts in the sense of moveable objects) and environmental evidence. As archaeological heritage can be used to gain knowledge and understanding of the past it is of great cultural and scientific importance.

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 sites may have no visible surface features; the surface features of an archaeological site may have decayed completely or been deliberately removed but archaeological deposits and features may survive beneath the surface.

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

Archaeological heritage in the Gaeltacht includes ancient field systems, megalithic tombs, standing stones, ringforts, children's burial grounds and clochans.

4.9.1.2 Record of Monuments and Places

The National Monument Acts 1930-2004 are the primary legislative framework for the protection of archaeological heritage in Ireland. Through the definition of monuments, historic monuments, and national monuments a wide range of structures and features fall under the remit of these Acts.

The Record of Monuments and Places (RMP) was established under Section 12 of the

National Monuments (Amendment) Act 1994 and structures, features, objects or sites listed in this Record are known as Recorded Monuments. The term Monument refers to any artificial or partly artificial building or structure, that has been carved, sculptured or worked upon or which appears to have been purposely put or arranged in position. It also includes any, or part of any prehistoric or ancient tomb, grave or burial deposit, or ritual, industrial or habitation site. Monuments that predate 1700 AD are automatically accorded the title Historic Monument. A 'National Monument' is defined in the National Monuments Acts (1930-2004) as a monument or the remains of a monument, the preservation of which is of national importance by reason of the historical, archaeological, traditional, artistic or architectural interest.

As well as extending protection to all known sites, now identified as Recorded Monuments, the National Monuments Acts 1930 – 2004 extends protection to all previously unknown archaeological items and sites that are uncovered through ground disturbance or the accidental discovery of sites located underwater. Where necessary, the Minister with responsibility for Heritage will issue preservation orders to ensure protection is afforded to sites believed to be under threat.

There are hundreds of archaeological monuments located across the Gaeltacht area.

There are no known archaeological monuments within An Cheathrú Rua. Monuments in the surrounding area are mapped on Figure 4.20.

Monuments within and surrounding An Spidéal and associated zones of notification, where available, are identified on Figure 4.21.

There are a various entries to RMP in Baile Chláir including Baile Chláir Abbey which is a National Monument in State Care. This monument has multiple other monuments associated with it – see Figure 4.22.

4.9.2 Architectural Heritage

4.9.2.1 Introduction

Architectural heritage in the Gaeltacht includes estate houses, castles and vernacular traditional buildings such as shops and houses.

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.

4.9.2.2 Protected Structures

Part IV of the Planning and Development Act requires every development plan to include a Record of Protected Structures (RPS). A 'protected structure' is a structure or a specific feature of the structure as may be specified that a Planning Authority considers to be of special interest from an architectural, historical, archaeological, artistic, cultural, scientific, social or technical point of view.

The placing of a structure on the RPS seeks to ensure that the character and interest of the structure is maintained and any changes or alterations to it are carried out in such a way as to retain and enhance that character and interest. The inclusion of a structure in the RPS confers certain responsibilities upon the owner of the structure and requires that planning permission be sought for any changes or alterations to the structure. The definition of a 'structure' or 'a specified part of a structure' for the purpose of the RPS includes "the interior of the structure; the land lying within the curtilage of the structure; any other structures lying within the curtilage of that structure and their interiors; and all fixtures and features which form part of the interior or exterior of the structure". From the date of notification of an intention to include a structure in the RPS, the owner has a duty to protect that structure from endangerment. The Council may, on receipt of a written request from the owner or occupier of a protected structure, issue a declaration under Section 57 of the Planning and Development Act 2000 (as amended), outlining certain works it considers would not materially affect the character and interest of the protected structure and which are, therefore, exempted from the requirement for planning permission. Any works that would materially affect the character and interest of a structure require planning permission. In general works to a protected structure should comply with the guidelines as set out in the Architectural Heritage Protection Guidelines from the Department.

There are hundreds of entries to the Record of Protected Structures located across the Gaeltacht area.

There are three entries to the RPS located within the centre of An Cheathrú Rua as identified on Figure 4.20.

There are various entries to the RPS located within An Spidéal as identified on Figure 4.21.

There are three entries to the RPS located within the town of Baile Chláir as identified on Figure 4.22.

4.9.2.3 National Inventory of Architectural Heritage

In addition to entries to the RPS, there are hundreds of entries to the National Inventory of Architectural Heritage (NIAH) across the Gaeltacht. The 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 for the Environment, Heritage and Local Government to the local authorities for the inclusion of particular structures in their RPS.

4.9.2.4 Architectural Conservation Areas

In accordance with Section 81 of the Planning and Development Act, Development Plans are required to include an objective to preserve the character of a place, area, group of structures or townscape, taking account of building lines and heights, that:

- a) is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or value, or
- b) contributes to the appreciation of protected structures,

if the Planning Authority is of the opinion that its inclusion is necessary for the preservation of the character of the place, area, group of structures or townscape concerned and any such place, area, group of structures or townscape shall be known as an "Architectural Conservation Area" (ACA).

An ACA may or may not include Protected Structures. In an ACA, protection is placed on the external appearance of such areas or structures.

ACAs designated in County Galway include one at Bearna Pier in the Gaeltacht. There are no ACAs located within An Cheathrú Rua, An Spidéal or Baile Chláir.

4.9.3 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.

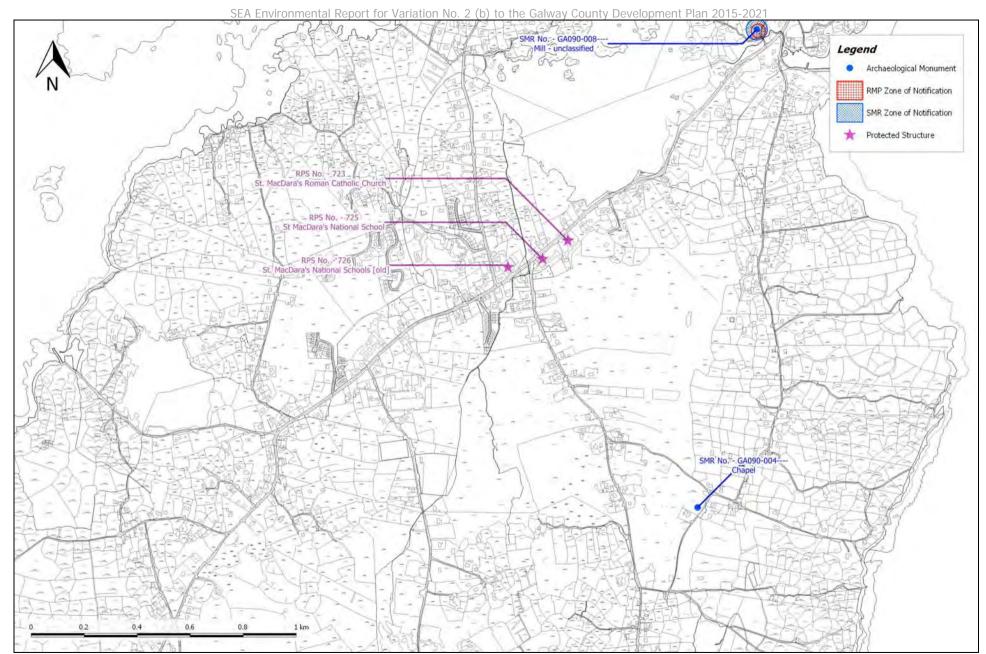


Figure 4.20 An Cheathrú Rua Cultural Heritage – Archaeological and Architectural Designations

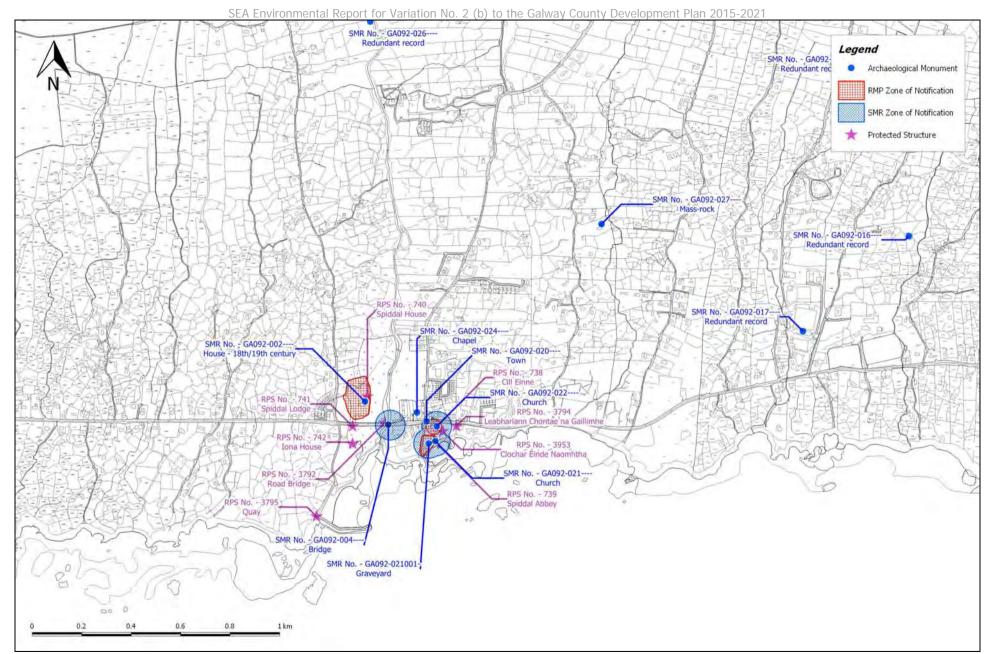


Figure 4.21 An Spidéal Cultural Heritage – Archaeological and Architectural Designation

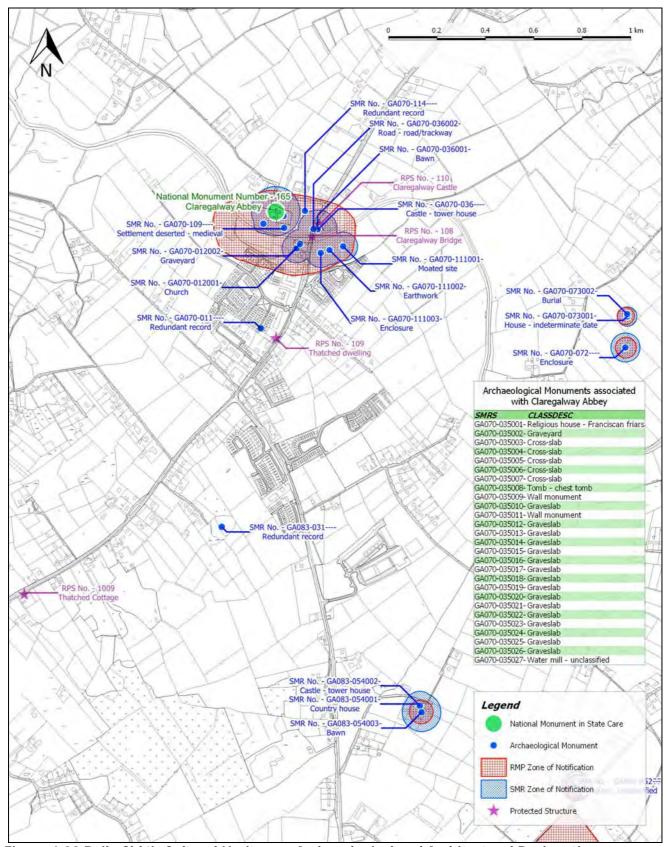


Figure 4.22 Baile Chláir Cultural Heritage - Archaeological and Architectural Designations

4.10 Landscape

4.10.1 Introduction

Landscapes are areas which are perceived by people and are made up of a number of layers: landform, which results from geological and geomorphological history; landcover, which includes vegetation, water, human settlements, and; human values which are a result of historical, cultural, religious and other understandings and interactions with landform and landcover.

4.10.2 Legislation

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.

4.10.3 Landscape Sensitivities and Focal Points/Views

The Landscape Character Assessment for County Galway (2003) identifies Landscape Character Areas, classifies landscapes in Galway according to their sensitivity (their ability to accommodate change or intervention without suffering unacceptable effects to character and values) and values and identifies focal points/views. Focal points/views include those of key heritage sites and along scenic tourism routes. Such listed views will inform lower tier project assessments and design.

The following five sensitivity classes were established by the Landscape Character Assessment:

- Class 1 Low sensitivity;
- Class 2 Moderate sensitivity;
- Class 3 High sensitivity;
- Class 4 Special; and,
- Class 5 Unique.

The most sensitive landscapes are 'Class 5 - Unique', 'Class 4 - Special' and 'Class 3 - High sensitivity' while landscapes of lesser sensitivity are 'Class 2 - Moderate sensitivity' and 'Class 1 - Low sensitivity'.

A map of the landscape sensitivity for the entire County is provided on Figure 4.23.

The landscape at An Cheathrú Rua (see Figure 4.24) is generally classified as being of High Sensitivity (Class 3) with some coastal areas identified as being of Special Sensitivity (Class 4). There are no focal points/views located within or adjacent to An Cheathrú Rua.

The landscape at An Spidéal (see Figure 4.25) is generally classified as being of High Sensitivity (Class 3) along the coast and within the village. Areas to the north of the village are classified as being of Moderate Sensitivity (Class 2). One focal point/view ('No. 77 View of the Catholic Church and High Tower') is located at An Spidéal (see Figure 4.26).

The landscape at and surrounding Baile Chláir is classified as being of Low Sensitivity (Class 1). This is not mapped. One focal point/view ('No. 35 Church and Cemetery Ruins in Baile Chláir') is shown on Figure 4.27.

4.10.4 Existing Problems

Primary and subsequent ecological succession and new developments have resulted in changes to the visual appearance of landscapes within County Galway overtime however legislative objectives governing landscape and visual appearance were not identified as being conflicted with.

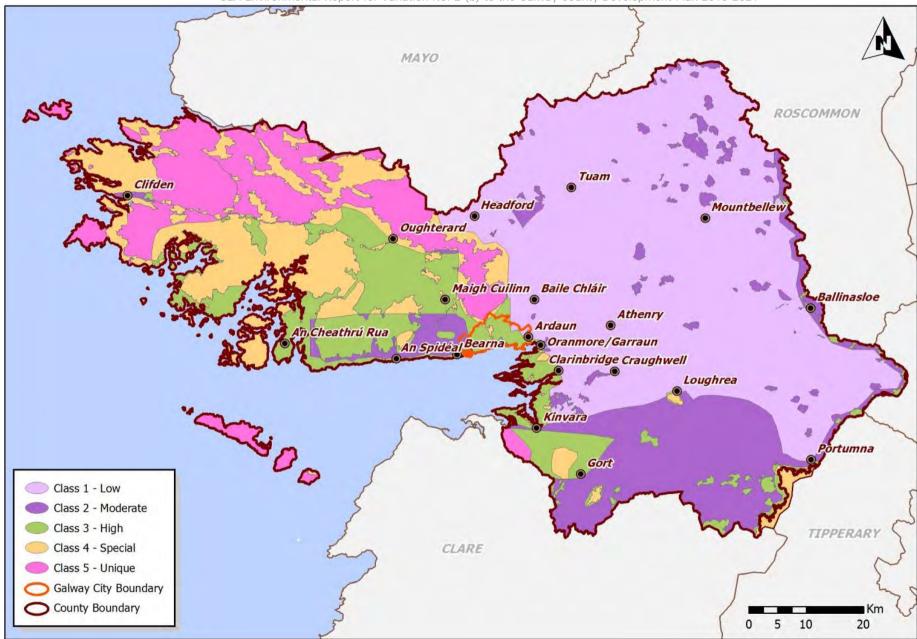
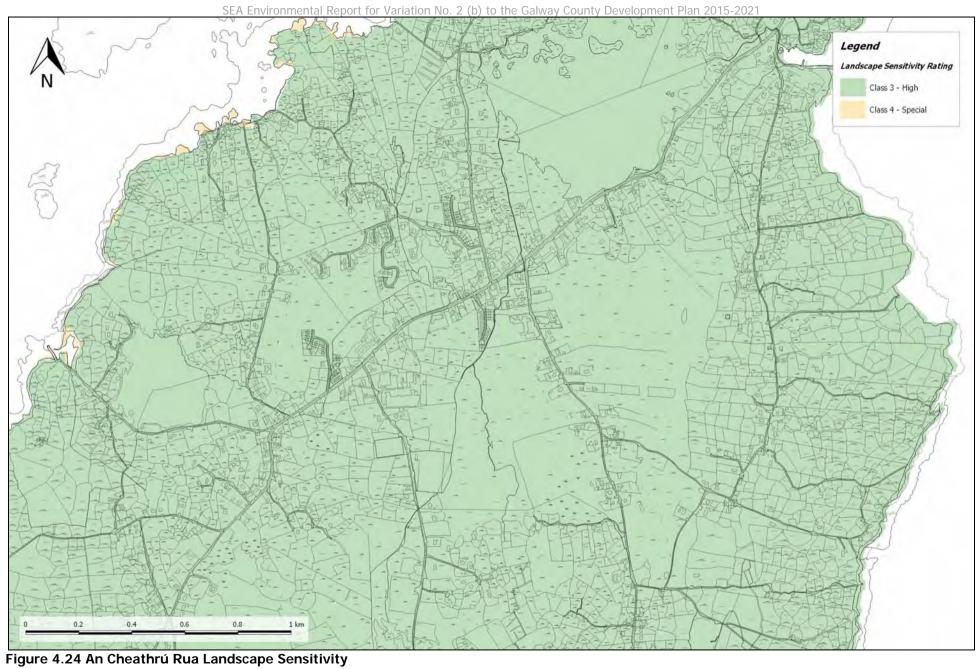


Figure 4.23 Landscape Sensitivity County Galway



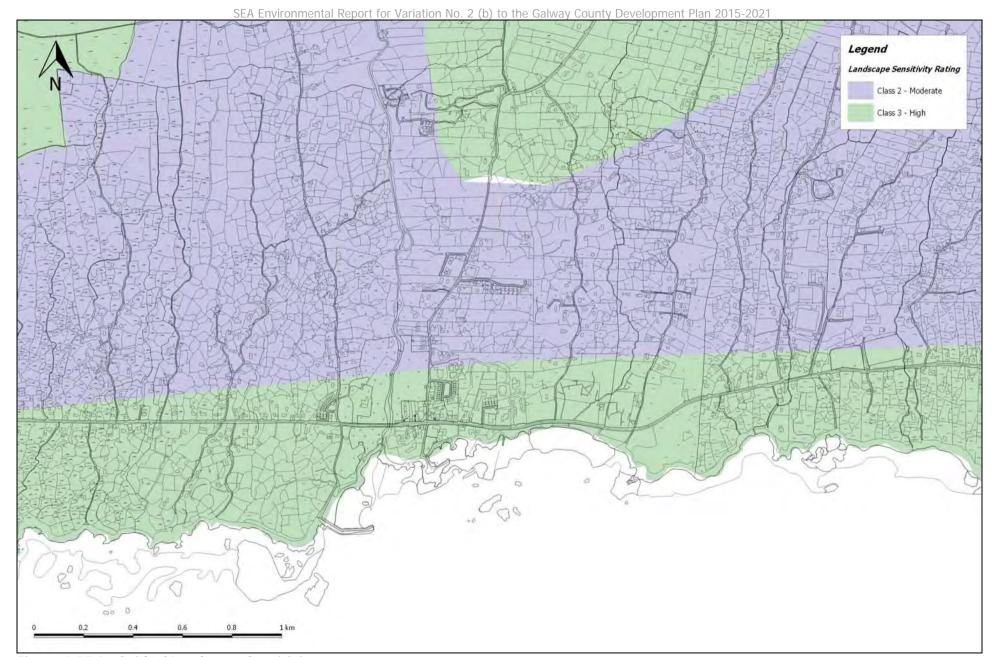


Figure 4.25 An Spidéal Landscape Sensitivity

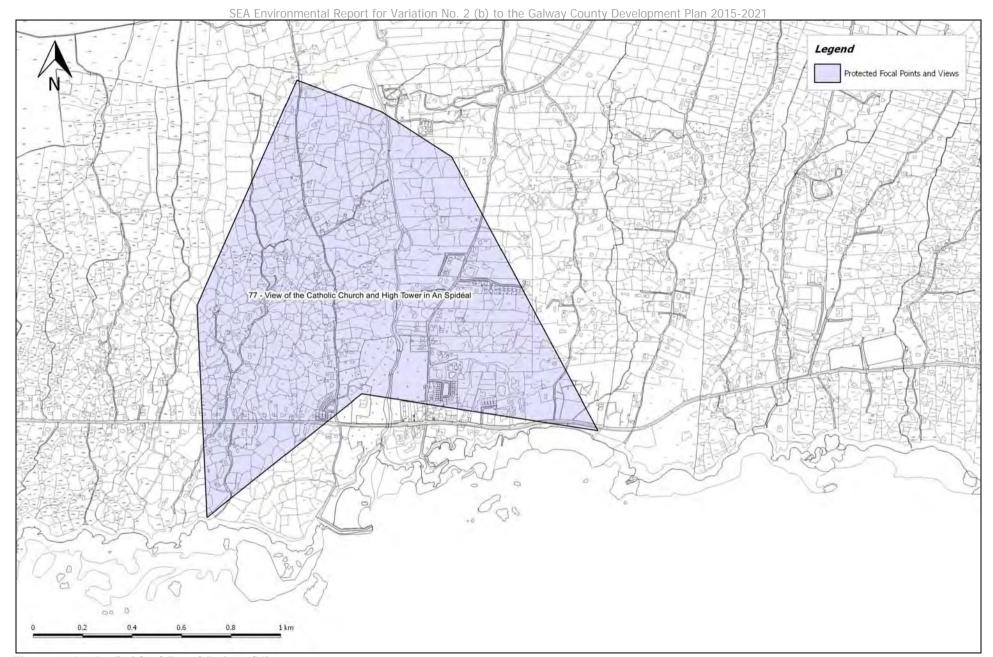


Figure 4.26 An Spidéal Focal Points/Views

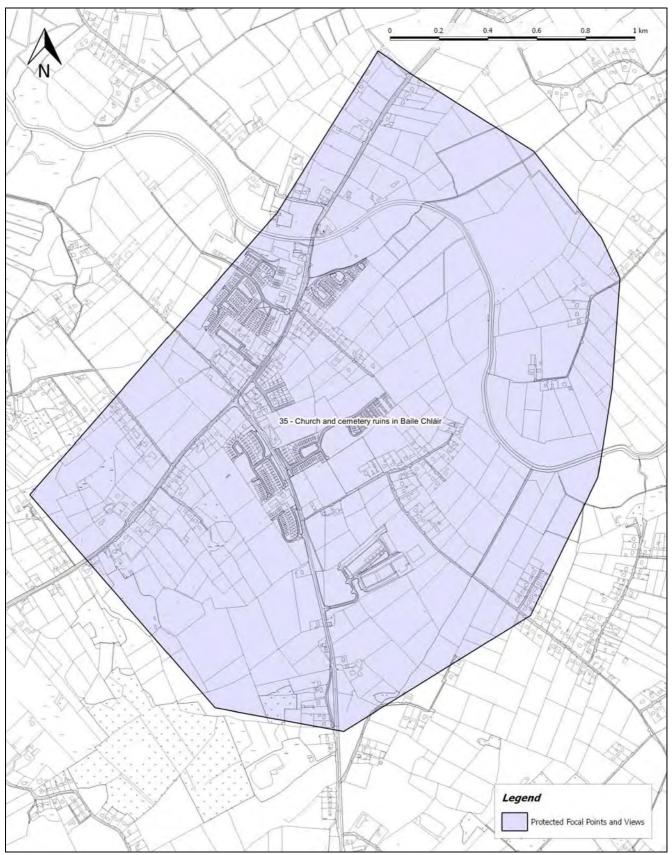


Figure 4.27 Baile Chláir Focal Points/Views

Section 5 Strategic Environmental Objectives

Strategic Environmental Objectives (SEOs) are methodological measures developed from policies which generally govern environmental protection objectives established at international, Community or Member State level e.g. the environmental protection objectives of various European Directives which 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 Variation 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 varied as well identifying targets which the Plan can help work towards.

All SEOs, indicators and targets are provided on Table 5.1 overleaf while background to these measures is provided in the subsections below.

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

Table 5.1 Strategic Environmental Objectives, Indicators and Targets				
Environmental	Strategic Environmental	Selected Indicator(s)	Selected Target(s)	
Component	Objective(s)	P1. Concernation status of helitate	P1. Maintanance of forcership	
Biodiversity, Flora and Fauna	B1: To ensure compliance with the Habitats and Birds Directives with regard to the protection of European Sites and Annexed habitats and species ²³	B1: Conservation status of habitats and species as assessed under Article 17 of the Habitats Directive	B1: Maintenance of favourable conservation status for all habitats and species protected under national and international legislation to be unaffected by implementation of the Plan (as varied) ²⁴	
	B2: To ensure compliance with Article 10 of the Habitats Directive with regard to the management of features of the landscape which - by virtue of their linear and continuous structure or their function act as stepping stones (designated or not) - are of major importance for wild fauna and flora and essential for the migration, dispersal and genetic exchange of wild species	B2: Percentage loss of functional connectivity without remediation resulting from development provided for by the Plan (as varied)	B2: No significant ecological networks or parts thereof which provide functional connectivity to be lost without remediation resulting from development provided for in the Plan (as varied)	
	B3: To avoid significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites ²⁵ and to ensure compliance with the Wildlife Acts 1976-2010 with regard to the protection of species listed on Schedule 5 of the principal Act	B3i: Number of significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites resulting from development provided for by the Plan (as varied) B3ii: Number of significant impacts on the protection of species listed on Schedule 5 of the Wildlife Act 1976	B3i: Avoid significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites resulting from development provided for by the Plan (as varied) B3ii: No significant impacts on the protection of species listed on Schedule 5 of the Wildlife Act 1976	
	B4: To sustain 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	B4: Population of the county involved in land management	B4: Sustain the population of the county involved in land management	
Population and Human Health	PHH1: To protect populations and human health from exposure to incompatible landuses	spatially concentrated deterioration in human health arising from environmental factors resulting from development provided for by the Plan (as varied), as identified by the Health Service Executive and Environmental Protection Agency	concentrations of health problems arising from environmental factors as a result of implementing the Plan (as varied)	
Soil	S1: To avoid damage to the hydrogeological and ecological function of the soil resource in County Galway	S1: Soil extent and hydraulic connectivity	S1: To minimise reductions in soil extent and hydraulic connectivity	

²³ 'Annexed habitats and species' refer to those listed under Annex I, II & IV of the EU Habitats Directive and Annex I of the EU Birds Directive.

 $^{^{24}}$ Except as provided for in Section 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.

25 The Planning and Development Act 2000 as amended defines a 'wildlife site'.

Environmental Component	Strategic Environmental Objective(s)	Selected Indicator(s)	Selected Target(s)
Water	W1: To maintain and improve, where possible, the quality and status of surface waters	W1i: Classification of Overall Status (comprised of ecological and chemical status) under the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (SI No. 272 of 2009) W1ii: Mandatory and Guide values as set by the EU Bathing Water Directive and transposing Bathing Water Quality Regulations (SI No. 79 of 2008)	W1i: Not to cause deterioration in the status of any surface water or affect the ability of any surface water to achieve <i>good status</i> ²⁶ W1ii: To achieve - as a minimum - Mandatory values and, where possible, to achieve Guide values as set by the EU Bathing Water Directive and transposing Bathing Water Quality Regulations (SI No. 79 of 2008)
	W2: To prevent pollution and contamination of ground water	W2: Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC	W2: Not to affect the ability of groundwaters to comply with Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC
	W3: To comply as appropriate with the provisions of the Planning System and Flood Risk Management: Guidelines for Planning Authorities (DEHLG and OPW, 2009)	W3: Number of incompatible developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk	W3: Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk in compliance with <i>The Planning System and Flood Risk Management Guidelines for Planning Authorities</i>
Material Assets	M1: To serve new development with adequate and appropriate waste water treatment	M1: Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the Plan (as varied)	M1: All new developments granted permission to be connected to and adequately and appropriately served by waste water treatment over the lifetime of the Plan (as varied)
	M2: To serve new development with adequate drinking water that is both wholesome and clean	M2: Number of non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health as a result of implementing the Plan (as varied)	M2: No non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health as a result of implementing the Plan (as varied)
	M3: To reduce waste volumes, minimise waste to landfill and increase recycling and reuse.	M3i: Total collected and brought household waste M3ii: Packaging recovered (t) by self-complying packagers	M3i: Minimise increases in and, where possible, reduce household waste generation M3ii: Maximise increases in packaging recovered (t) by self-complying packagers
Air and Climatic Factors	C1: To reduce travel related emissions to air and to encourage modal change from car to more sustainable forms of transport	C1: Percentage of population travelling to work, school or college by public transport or non-mechanical means	C1: An increase in the percentage of the population travelling to work, school or college by public transport or non-mechanical means

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 $^{^{26}}$ Good status as defined by the WFD equates to approximately the following in the current national schemes of classification as set out by the EPA:

Q4 in the biological classification of rivers;

[•] Mesotrophic in the classification of lakes; and

[•] Unpolluted status in the Assessment of Trophic Status of Estuaries and Bays in Ireland (ATSEBI).

Environmental	Strategic Environmental	Selected Indicator(s)	Selected Target(s)
Component Cultural Heritage	Objective(s) CH1: To protect archaeological heritage including entries to the Record of Monuments and Places and/or their context	CH1: Percentage of entries to the Record of Monuments and Places - including Zones of Archaeological Potential (and the context of the above within the surrounding landscape where relevant) – protected from adverse effects resulting from development which is granted permission under the Plan (as varied)	CH1: Protect entries to the Record of Monuments and Places - including Zones of Archaeological Potential (and their context of the above within the surrounding landscape where relevant) from adverse effects resulting from development which is granted permission under the Plan (as varied)
	CH2: To protect architectural heritage including entries to the Record of Protected Structures and Architectural Conservation Areas and their context	CH2: Percentage of entries to the Record of Protected Structures and Architectural Conservation Areas and their context protected from adverse effects resulting from development which is granted permission under the Plan (as varied)	CH2: Protect entries to the Record of Protected Structures and Architectural Conservation Areas and their context from adverse effects resulting from development which is granted permission under the Plan (as varied)
Landscape	L1: To avoid significant adverse impacts on the landscape - especially with regard to the County's landscapes which are most valuable and most sensitive to change and protected focal points and views.	L1: Number of complaints received from statutory consultees regarding avoidable impacts on the landscape - especially with regard to the County's landscapes which are most valuable and most sensitive to change and protected focal points and views - resulting from development which is granted permission under the Plan (as varied)	L1: No developments permitted which result in avoidable impacts on the landscape - especially with regard to the County's landscapes which are most valuable and most sensitive to change and protected focal points and views - resulting from development which is granted permission under the Plan (as varied)

Section 6 Description of Alternatives

6.1 Introduction

As per the requirements of the SEA Directive, the SEA considered reasonable alternatives, which are capable of being implemented for Variation 2 (b), taking into account the objectives and the geographical scope of the Plan (as varied).

Available alternatives are limited by the scope of the Variation. Focus is given to the land use zoning provisions relating to three settlements - An Cheathrú Rua, An Spidéal and Baile Chláir - that is provided for by the Variation.

An evaluation of alternatives is provided at Section 7.

Galway County Council in preparing Variation 2b developed three alternatives for each of the settlements in An Cheathrú Rua, An Spidéal and Baile Chláir as follows:

6.2 Alternative 1: Even Development

- Achieving the population targets: All three settlements to reach the population targets by 2021, resulting in balanced orderly development and implementation of the core strategy as contained in Chapter 2 of the Galway County Development Plan 2015-2021;
- The infrastructure required to be in place to achieve the growth targets is already in place;
- Residential Development to take place on R1 lands in the lifetime of the Gaeltacht Plan, unless a comprehensive justification is provided for alternative residential lands;
- Community development facilities to be developed in tandem with the targeted growth of the settlements;
- Village Centre developments would be developed in a planned and coordinated manner;
- Opportunity sites identified with clear design and proposed uses identified;
- Open Space and Recreational Lands would be preserved.

Points of note for An Cheathrú Rua Alternative 1 (see Figure 6.1)

- This alternative provides Village Centre/Mixed Uses/Brownfield Development within and around the existing centre
- Phase I Residential Expansion Areas are provided at four areas within the town

Points of note for An Spidéal Alternative 1 (see Figure 6.3)

- This alternative provides Village Centre/Mixed Uses/Brownfield Development within and around the existing centre
- Two Phase I Residential Expansion Areas are provided both to the north along Baile Árd. These areas would allow for an additional population of 25 persons that would be able to be accommodated by the existing waste water treatment plant

Points of note for Baile Chláir Scenario 1(see Figure 6.5)

- This alternative provides Village Centre/Mixed Uses/Brownfield Development within and around the existing centre
- Phase I Residential Expansion Areas are provided at three areas within the town

6.3 Alternative 2: Sporadic Development

- Achieving the population targets: All three settlements to reach the population targets by 2021, resulting in the implementation of the core strategy as contained in Chapter 2 of the Galway County Development Plan 2015-2021.
- Additional infrastructure would be required to accommodate sporadic development, more than would be required for Alternative 1 'Even Development'.
- Residential Development to take place on R1 and R2 lands in the lifetime of the Gaeltacht Plan, unless a evidence based justification is provided for alternative residential lands.
- Village centre development would be sporadic and uncoordinated around the village centre zonings.
- Opportunity sites are identified but no clear guidance on the design parameters or uses identified.

Points of note for An Cheathrú Rua Alternative 2 (see Figure 6.2)

- This alternative provides Village Centre/Mixed Uses/Brownfield Development within and around the existing centre.
- Phase I Residential Expansion Areas are provided at seven areas within the town.

Points of note for An Spidéal Alternative 2 (see Figure 6.4)

- This alternative provides Village Centre/Mixed Uses/Brownfield Development within and around the existing centre.
- Four Phase I Residential Expansion Areas are provided. These areas would allow for a population in excess of 25 persons that would not be able to be accommodated by the existing waste water treatment plant.

Points of note for Baile Chláir Alternative 2 (see Figure 6.6)

- This alternative provides Village Centre/Mixed Uses/Brownfield Development within and around the existing centre.
- Phase I Residential Expansion Areas are provided at five areas within the town.

6.4 Alternative 3: Haphazard Development

- Achieving the population targets: All three settlements to reach the population targets by 2021, resulting in the implementation of the core strategy as contained in Chapter 2 of the Galway County Development Plan 2015-2021.
- Additional infrastructure would be required to accommodate sporadic development, more than would be required for Alternative 1 'Even Development' or Alternative 2 'Sporadic Development', development would have to be serviced by private waste water treatment systems which would have to be properly maintained.
- Residential development would occur on a piecemeal and haphazard basis within the three settlements.
- Ribbon and backland development would be a dominant feature within the settlements.
- Village centre development would be permitted on a number of different zonings and not concentrated on the village centre.
- No opportunity sites identified-laissez faire attitude in relation to development.
- Each application would be considered on its own merits and no land use zoning is provided for

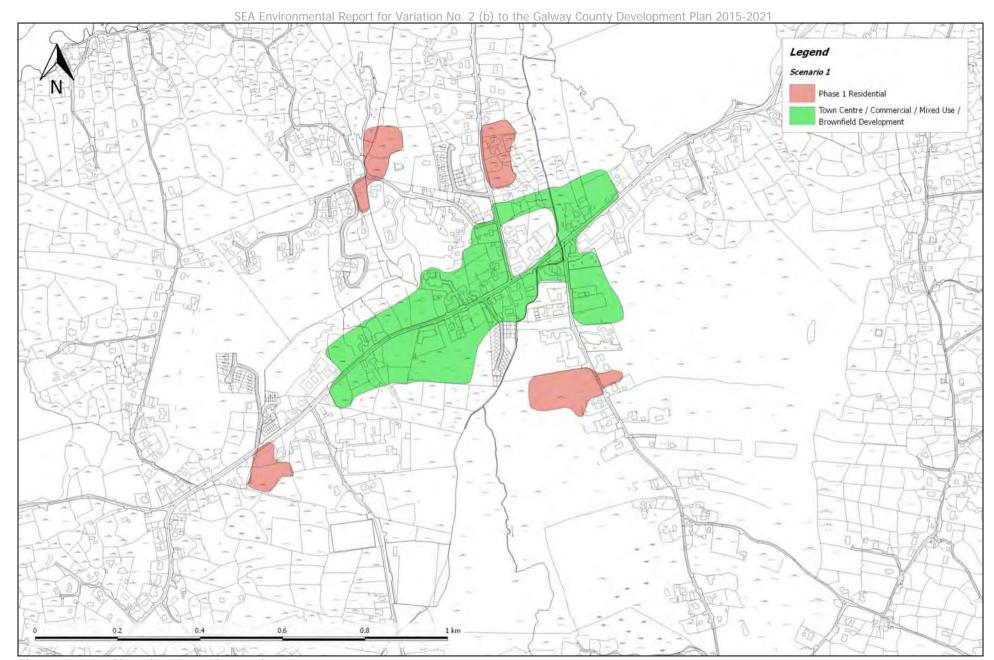


Figure 6.1 An Cheathrú Rua Alternative 1

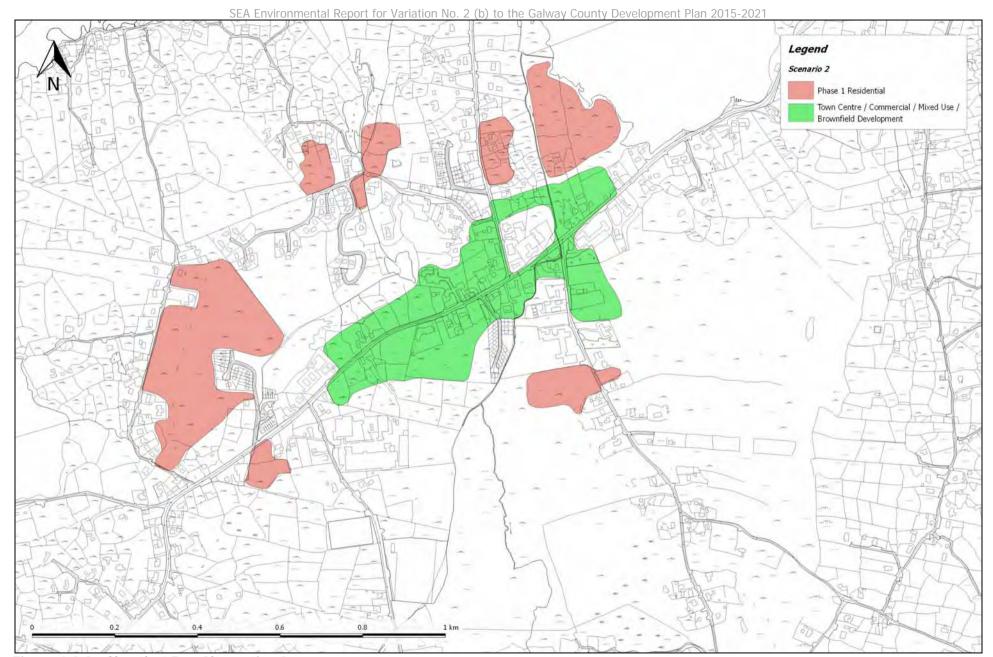


Figure 6.2 An Cheathrú Rua Alternative 2

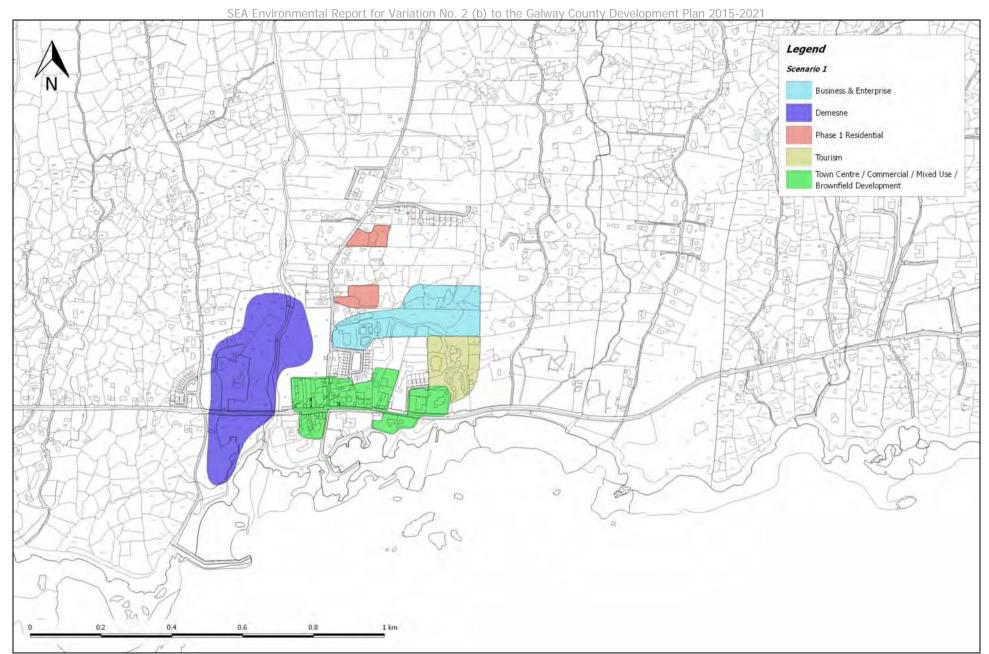


Figure 6.3 An Spidéal Alternative 1

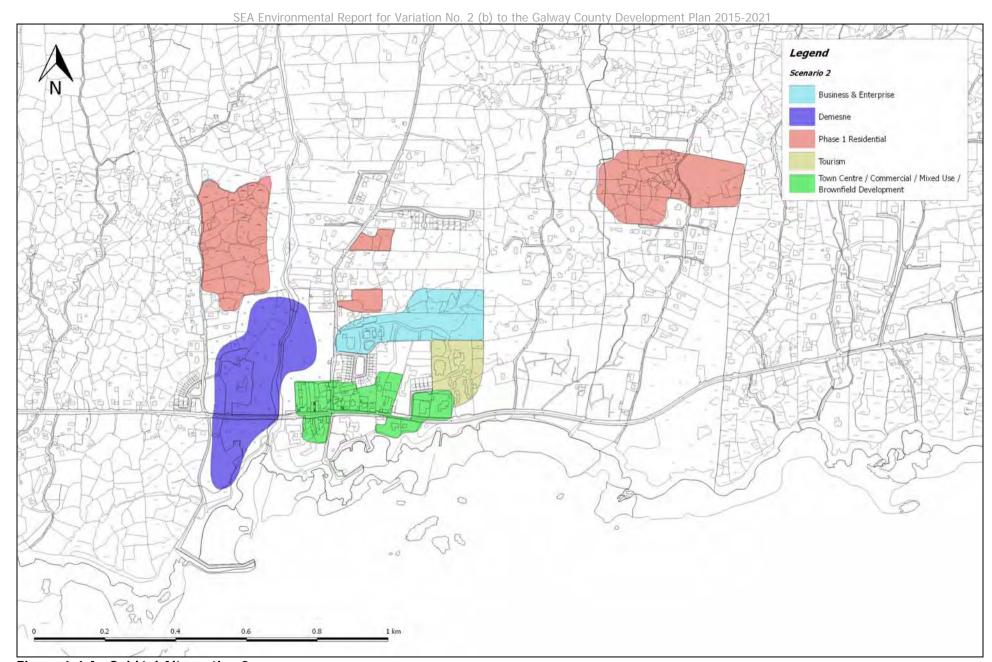


Figure 6.4 An Spidéal Alternative 2

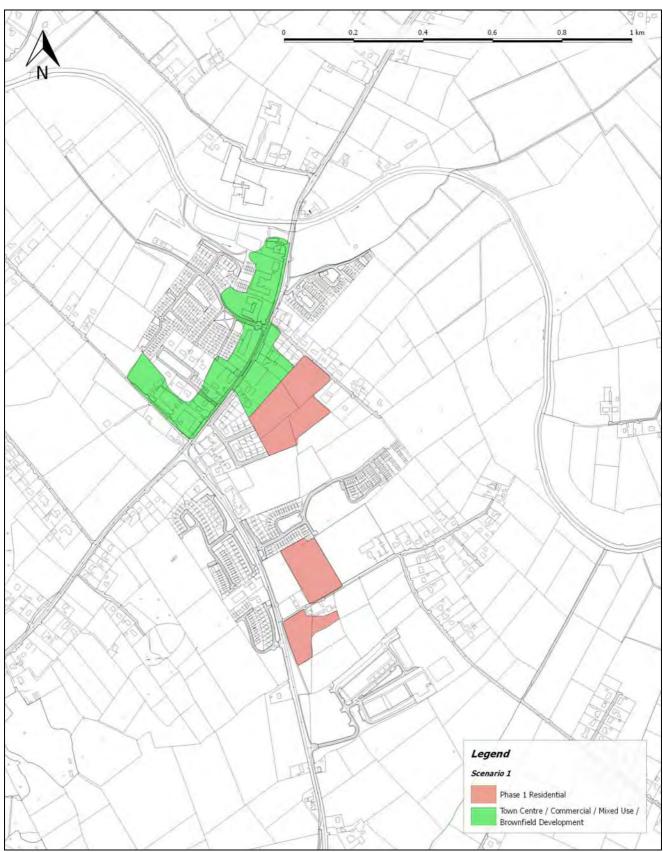


Figure 6.5 Baile Chláir Alternative 1

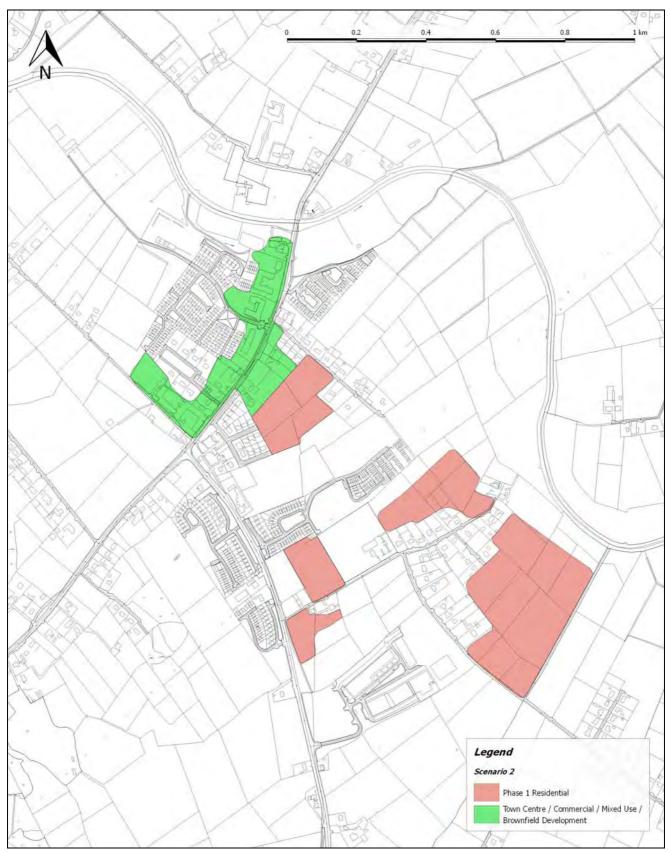


Figure 6.6 Baile Chláir Alternative 2

Section 7 Evaluation of Alternatives

7.1 Introduction

This section provides an evaluation of the environmental effects of implementing the alternatives including the taking into account of cumulative effects.

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 evaluation of alternatives.

alternatives are evaluated compatibility criteria (see Table 7.2 below) in order to determine how they would be likely to affect the status of the SEOs. The SEOs and the alternatives are arrayed against each other to identify which interactions - if any - would cause effects on specific components of the environment. Where the appraisal identifies a likely conflict with the status of an SEO the relevant SEO code is entered into the conflict column - e.g. B1 which stands for the SEO likely to be affected - in this instance 'to ensure compliance with the Habitats and Birds Directives with regard to the protection of European Sites and Annexed habitats and species²⁷′.

The interactions identified are reflective of likely significant environmental effects²⁸.

The degree to which effects can be determined is limited as the Variation will be implemented through the lower tier environmental assessments and/or decision making of the Council. Nonetheless a comparative evaluation of the various alternatives can be provided.

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 $^{^{\}rm 27}$ 'Annexed habitats and species' refer to those listed under Annex I, II & IV of the EU Habitats Directive and Annex I of the EU Birds Directive.

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

Table 7.1 Strategic Environmental Objectives

Environmental	SEO Code	SEO
Component		
Biodiversity, Flora and Fauna	B1	To ensure compliance with the Habitats and Birds Directives with regard to the protection of European Sites and Annexed habitats and species ²⁹
	B2	To ensure compliance with Article 10 of the Habitats Directive with regard to the management of features of the landscape which - by virtue of their linear and continuous structure or their function act as stepping stones (designated or not) - are of major importance for wild fauna and flora and essential for the migration, dispersal and genetic exchange of wild species
	В3	To avoid significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites ³⁰ and to ensure compliance with the Wildlife Acts 1976-2010 with regard to the protection of species listed on Schedule 5 of the principal Act
	B4	To sustain 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
Population and Human Health	PHH1	To protect populations and human health from exposure to incompatible landuses
Soil	S 1	To avoid damage to the hydrogeological and ecological function of the soil resource in County Galway
Water	W1	To maintain and improve, where possible, the quality and status of surface waters
	W2	To prevent pollution and contamination of ground water
	W3	To comply as appropriate with the provisions of the Planning System and Flood Risk Management: Guidelines for Planning Authorities (DEHLG and OPW, 2009)
Material Assets	M1	To serve new development with adequate and appropriate waste water treatment
	M2	To serve new development with adequate drinking water that is both wholesome and clean
	M3	To reduce waste volumes, minimise waste to landfill and increase recycling and reuse.
Air and Climatic Factors	C1	To reduce travel related emissions to air and to encourage modal change from car to more sustainable forms of transport
Cultural Heritage	CH1	To protect archaeological heritage including entries to the Record of Monuments and Places and/or their context
	CH2	To protect architectural heritage including entries to the Record of Protected Structures and Architectural Conservation Areas and their context
Landscape	L1	To avoid significant adverse impacts on the landscape - especially with regard to the County's landscapes which are most valuable and most sensitive to change and protected focal points and views.

Table 7.2 Criteria for appraising the effect of Alternatives on SEOs

Likely to <u>Improve</u> status of SEOs			Potential Conflict with status of SEOs - likely to be mitigated			Probable Conflict with status
to the Greatest degree	to a Moderate degree	to a <u>Lesser</u> degree	to a <u>Lesser</u> degree	to a Moderate degree	to a Greater degree	of SEOs- unlikely to be fully mitigated

²⁹ 'Annexed habitats and species' refer to those listed under Annex I, II & IV of the EU Habitats Directive and Annex I of the EU Birds Directive. ³⁰ The Planning and Development Act 2000 as amended defines a 'wildlife site'.

7.3 Cumulative Effects

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

There are 2 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, future development could result in environmental conflicts and lead to a deterioration in environmental integrity. The interrelationships between environmental components that help determine these potential effects are identified on Table 8.3 in Section 8 e.g. interrelationships between: human health and water quality; human health and air quality; human health and flood risk; and ecology and water quality.

Other types of *intra-Plan* cumulative effect that could occur include:

- o In combination effects arising from development at multiple settlements that are the subject of settlement plans provided for by the Plan as varied; and
- o Effects arising from development provided for by the Variation in combination with effects arising from development provided for by other parts of the existing Plan;
- Potential *inter-Plan* cumulative effects these arise when the effects of the implementation of one plan occur in combination with those of other plans, programmes, developments, etc.

Effects that may arise as a result of implementing the Plan as varied will be mitigated (by both provisions integrated into the Variation and existing provisions already in force through the Plan – see Section 9) to the extent that the only residual adverse effects likely to occur as a result of implementation of the Variation are those which are identified at Table 8.2.

With regard to potential *inter-Plan* cumulative environmental effects, these occur as a result of the combination of: potential environmental effects which are identified by the assessment; and the effects arising from other legislation, plans, programmes or developments.

In considering the relationship with legislation and other plans and programmes it is important to note that the Plan will be implemented within areas that have existing plans and programmes (see Sections 4 and 5 and Appendix I) for a range of sectors at a range of levels (e.g. National, River Basin District, Regional, County and Local) that are already subject to more specific higher and lower tier SEA and AA.

The assessment of the likely *inter-Plan* cumulative environmental effects requires knowledge of the likely effects of all plans/developments under consideration. The assessment is limited in this instance as there has been limited assessment of the likely types of developments provided for by other policies, plans and programmes that could occur in combination with the implementation of the Variation. Where they exist, the SEA recognises the existence of other environmental assessments with a view to avoid duplication of assessment, in compliance with the SEA Directive.

The SEA undertaken for the Plan has taken account of the Council's obligation to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Cumulative effects that have been considered include those resulting from the Variation and:

- Other land use Plans;
- Water services, transport and energy infrastructure plans (e.g. Irish Water's Water Services Strategic Plan and associated Capital Investment Plan and Grid25 and associated Implementation Programme); and
- Environmental protection and management plans.

Such potential cumulative effects include the following (note that potential adverse cumulative effects will be mitigated by both provisions integrated into the Variation and existing provisions already in force through the County Development Plan – see Section 9):

- Contributions towards reductions in 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 sustainable mobility/a shift from motorised transport modes to more sustainable and non-motorised transport modes.
- 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 which 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, agriculture 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;
- Potential cumulative effects on flood risk by, for example, development of greenfield lands or obstruction of flood paths;
- 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 7.4. These plans and programmes from other sectors undergo SEA and comply with environmental legislation while projects are subject to EIA and AA, as relevant.

7.4 Detailed Assessment of Alternatives

7.4.1 Significant Positive Effects Common to all Alternatives

By providing for development within existing development boundaries and facilitating the use of existing utilities and brownfield sites, all alternatives would be likely to contribute towards a reduced need to develop more sensitive, undeveloped areas elsewhere in the wider Gaeltacht area that are further from established settlements and less well serviced. This would be likely to result in significant positive environmental effects on environmental components as indicated on Table 7.3.

Table 7.3 Significant Positive Effects common to all Alternatives

Environmental Component	Significant Positive Effect, likely to occur
Biodiversity and Flora and Fauna	 Contributes towards protection of ecology (including designated sites, ecological connectivity, habitats) – due to increased utilisation of lands within existing development boundaries and use of existing utilities and brownfield sites. Contributes towards protection of ecology with respect to the provision of water services. Contributes towards protection of ecology as a result of contributing towards the protection of environmental vectors, including air and water. Is consistent with approach provided by the existing Plan, to sustain 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
Population and Human Health	 Contributes towards protection of human health with respect to the provision of water services and the provision of transport infrastructure integrated with land use planning – and associated interactions with sustainable mobility, emissions and energy usage. Contributes towards protection of human health as a result of contributing towards the protection of environmental vectors, including air and water.
Soil	 Contributes towards protection of soil – due to increased utilisation of lands within existing development boundaries and use of existing utilities and brownfield sites. Contributes towards protection of soil with respect to the provision of water services.
Water	 Contributes towards protection and management of ground and surface waters due to facilitating development within established and serviced settlement centres.
Material Assets	 Allows for use of planned infrastructure including water services infrastructure and transport infrastructure. Makes use of existing water services and drainage infrastructure.
Air and Climatic Factors	 Facilitates contribution towards a shift from car to more sustainable and non-motorised transport modes. Facilitates contribution towards reducing congestion and associated adverse effects on air quality. Facilitates contribution towards reductions in travel related greenhouse gas and other emissions to air.
Cultural Heritage	 Contributes towards protection of cultural heritage in wider region by facilitating development within existing settlements.
Landscape	• Contributes towards protection of wider landscape by facilitating development within existing settlements.

Although significant positive environmental effects would occur under each of the alternatives, the extent to which they would occur varies across each of the alternatives and this is addressed under the evaluation of each of the alternatives below.

7.4.2 Potentially Significant Adverse Effects Common to all Alternatives

All of the alternatives provide for development of the relevant settlements. Such development would have the potential to conflict with environmental components – to different degrees. Potentially significant adverse environmental effects arising from this conflict are common to all alternatives and are described on Table 7.4. For the Variation, these effects will be mitigated by both provisions integrated into the Variation and existing provisions already in force through the County Development Plan – see Section 9.

Although potentially significant adverse environmental effects would occur under each of the alternatives, the extent to which they would occur varies across each of the alternatives and this is addressed under the evaluation of each of the alternatives below.

Table 7.4 Potentially Significant Adverse Environmental Effects, if unmitigated, common to all alternatives

Environmental Component	Potentially Significant Adverse Environmental Effects, if unmitigated
Biodiversity and Flora and Fauna	Arising from both construction and operation of development and associated infrastructure: o 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; o 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.
Population and Human Health	 Potential interactions if effects upon environmental vectors such as water and air are not mitigated.
Soil	 Damage to the hydrogeological and ecological function of the soil resource.
Water	 Adverse impacts upon the status of water bodies arising from changes in quality, flow and/or morphology. Increase in the risk of flooding.
Material Assets	 Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts). Failure to comply with drinking water regulations and serve new development with adequate drinking water that is both wholesome and clean (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts). Increases in waste levels .
Air and Climatic Factors	o Emissions to air including greenhouse gas emissions and other emissions.
Cultural Heritage	 Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities.
Landscape	 Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape, especially with regard to the County's landscapes which are most valuable and most sensitive to change and protected focal points and views.

7.4.3 Evaluation against SEOs

By:

- Concentrating Village Centre/Mixed Uses/Brownfield Development within and around existing village centres and
- Providing for new Residential Expansion Areas over a relatively small number of sites that are already or most easily served by infrastructure and could serve demand for new development

Alternative 1 'Even Development' would result in the greatest degree of significant positive effects (see Section 7.4.1) and least degree of potential conflicts (see Section 7.4.2). Development would be most likely to occur within or closest to existing settlement centres on serviced sites.

By:

- Concentrating Village Centre/Mixed Uses/Brownfield Development within and around existing village centres and
- Providing for new Residential Expansion Areas over a greater number of sites that could serve demand for new development

Alternative 2 'Sporadic Development' would result in a relatively moderate degree of significant positive effects (see Section 7.4.1) and a relatively moderate degree of potential conflicts (see Section 7.4.2). In comparison to Alternative 2, development would be spread out over a greater number of sites, some not currently serviced and some further from settlement centres.

Additional infrastructure would be required to accommodate sporadic development, more than would be required for Alternative 1 'Even Development'. In An Spidéal, for example, Alternative 2 would

allow for a population in excess of 25 persons that would not be able to be accommodated by the existing waste water treatment plant.

By:

- Not identifying opportunity sites; and
- Following a 'laissez faire' approach in relation to development, with each application considered on its own merits and no land use zoning would be provided for

Alternative 3 'Haphazard Development' would result in the least degree of significant positive effects (see Section 7.4.1) and greatest degree of potential conflicts (see Section 7.4.2). Development would be spread out over the entire area associated with each settlement with ribbon and backland development a dominant feature within the settlements. Although existing Plan provisions – including those relating to environmental protection/management and sustainable development – would have to be complied with, the potential for cumulative adverse effects would be significantly higher with this alternative.

All of the alternatives are consistent with approach provided by the existing Plan, to sustain 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.

Table 7.5 Assessment of Alternatives against Strategic Environmental Objectives

	Likely to <u>Improve</u> status of SEOs			<u>Potentia</u>	Probable Conflict		
Alternative	to the Greatest degree	to a Moderate degree	to a Lesser degree	to a Lesser degree	to a Moderate degree	to a Greater degree	with status of SEOs- unlikely to be fully mitigated
Alternative 1: Even Development	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	B4		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	B4		
Alternative 2: Sporadic Development		B1 B2 B3 B4 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1			B1 B2 B3 B4 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		
Alternative 3: Haphazard Development		B4	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B4	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	

7.5 The Selected Alternative for the Variation

The Selected Alternative for the Variation that emerged from the planning/SEA process is Alternative 1: Even Development.

This alternative has been selected and developed by the Planning Team and adopted by the Council having regard to both:

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

Land use zoning maps for the three settlements that evolved from the selection of Alternative 1 'Even Development' are provided at Figure 7.1, Figure 7.2 and Figure 7.3.

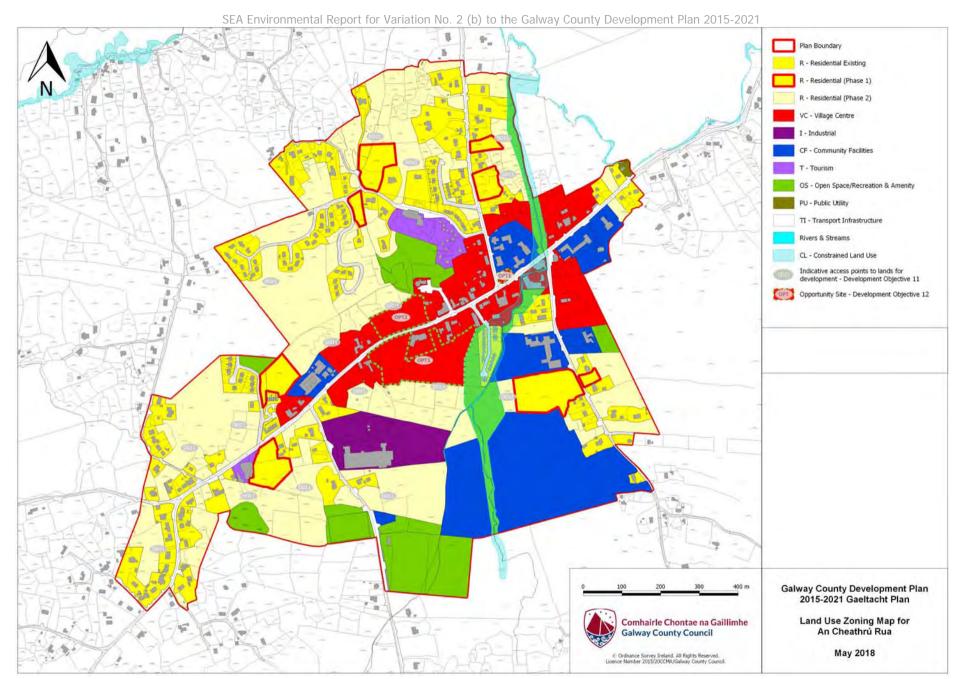


Figure 7.1 Land Use Zoning An Cheathrú Rua

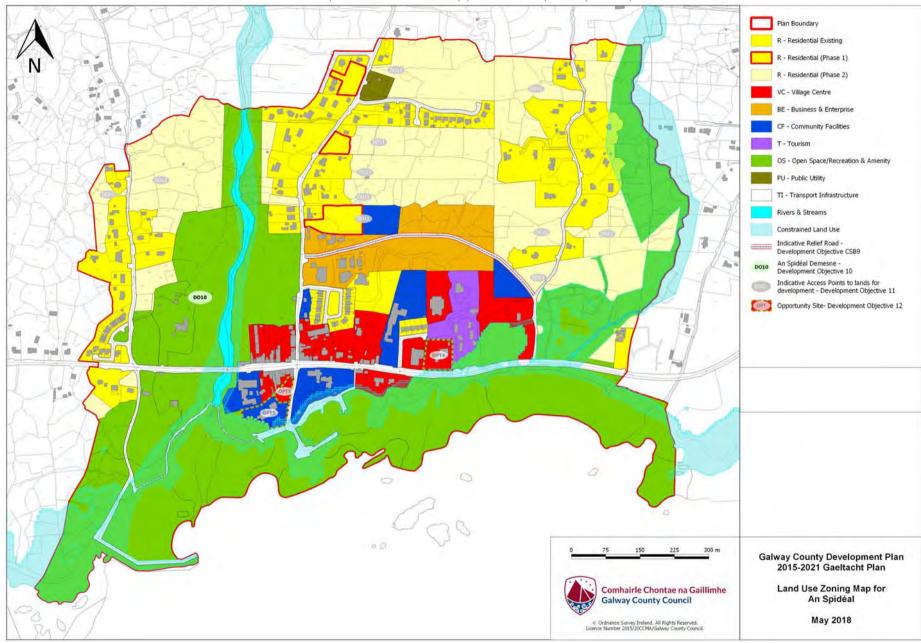


Figure 7.2 Land Use Zoning An Spidéal

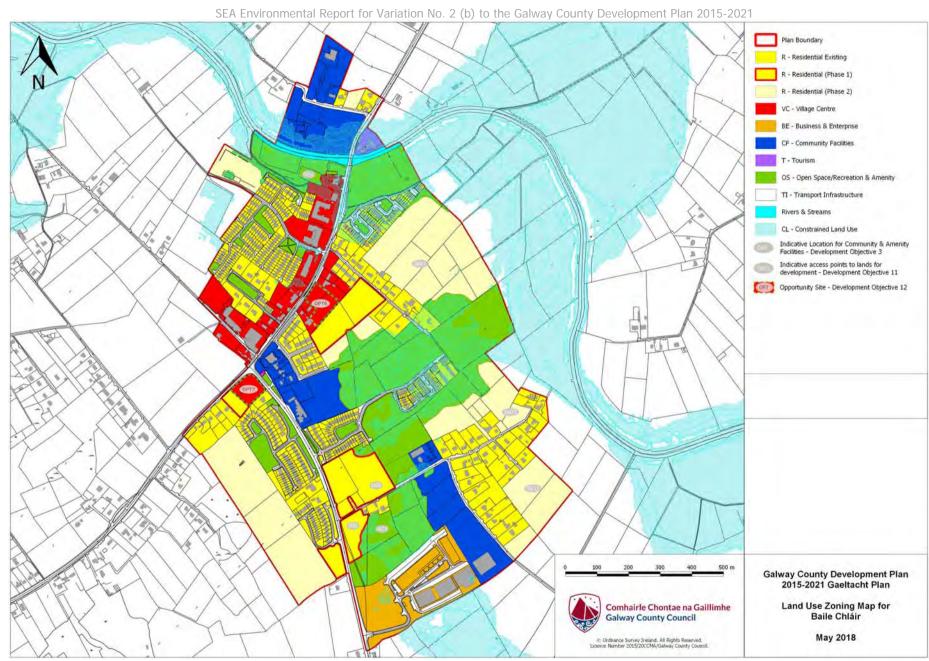


Figure 7.3 Land Use Zoning Baile Chláir

Section 8 Assessment of Variation 2 (b)

8.1 Introduction

This section provides an assessment of environmental effects from implementation of the Variation.

The provisions of the Variation are evaluated using compatibility criteria (see Table 8.1 below) in order to determine how they would be likely to affect the status of the SEOs. The SEOs and the provisions of the Variation are arrayed against each other to identify which interactions - if any - would cause effects on specific components of the environment. Where the appraisal identifies a likely conflict with the status of an SEO the relevant SEO code is entered into the conflict column - e.g. B1 which stands for the SEO likely to be affected - in this instance 'To ensure compliance with the Habitats and Birds Directives with regard to the protection of European Sites and Annexed habitats and species³¹.

The interactions identified are reflective of likely significant environmental effects³²;

- 1. Interactions that would be likely to improve the status of a particular SEO would be likely to result in a significant positive effect on the environmental component to which the SEO relates.
- 2. 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 would be likely to be mitigated by measures which have been integrated into the Plan/ Variation.
- 3. 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 negative effect on the environmental component to which the SEO relates.

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 as varied.

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

Table 8.1 Criteria for appraising the effect of Plan provisions on SEOs

Likely to <u>Improve</u> status of SEOs	Potential Conflict with status of SEOs - likely to be mitigated	Probable <u>Conflict</u> with status of SEOs- unlikely to be fully mitigated	No Likely interaction with status of SEOs
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³¹ 'Annexed habitats and species' refer to those listed under Annex I, II & IV of the EU Habitats Directive and Annex I of the EU Birds Directive.

³² These effects include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects.

8.2 Overall Evaluation

Galway County Council have integrated all recommendations arising from the SEA, AA and SFRA processes into the Variation (see Section 9).

By providing for development within existing development boundaries (in An Cheathrú Rua, An Spidéal and Baile Chláir) and facilitating the use of existing utilities and brownfield sites, the Variation would be likely to contribute towards a reduced need to develop more sensitive, undeveloped areas elsewhere in the wider County that are further from established settlements and less well serviced. This would be likely to result in significant positive environmental effects on various environmental components as detailed on Table 8.2 overleaf.

Table 8.2 provides a detailed overall evaluation of the environmental effects arising from the Variation. The effects encompass all in-combination/cumulative effects arising from implementation of the Variation. The potentially significant adverse environmental effects (if unmitigated) arising from implementation of the Variation are detailed as are residual effects, taking into account mitigation through both provisions integrated into the Variation and existing provisions already in force through the County Development Plan – 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 taken from Table 7.1.

Table 8.2 Overall Evaluation – Effects arising from Variation 2 (b)

Environmental Component	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Residual Adverse Effects	Relevant SEO Codes
Biodiversity and Flora and Fauna	 Contributes towards protection of ecology (including designated sites, ecological connectivity, habitats) – due to increased utilisation of lands within existing development boundaries and use of existing utilities and brownfield sites. Contributes towards protection of ecology with respect to the provision of water services. Contributes towards protection of ecology as a result of contributing towards the protection of environmental vectors, including air and water. Is consistent with approach provided by the existing Plan, to sustain existing sustainable rural management practices - and the communities who support them - to ensure the continuation of long established managed landscapes and the flora and fauna that they contain. 	Arising from both construction and operation of development and associated infrastructure: • Loss of/damage to biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species, listed species, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna; • Habitat loss, fragmentation and deterioration, including patch size and edge effects; and • Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species.	Loss of an extent of non-protected habitats and species arising from the replacement of seminatural land covers with artificial surfaces. Losses or damage to ecology (these would be in compliance with relevant legislation).	B1 B2 B3 B4
Population and Human Health	 Contributes towards protection of human health with respect to the provision of water services and the provision of transport infrastructure integrated with land use planning – and associated interactions with sustainable mobility, emissions and energy usage. Contributes towards protection of human health as a result of contributing towards the protection of environmental vectors, including air and water. 	Potential interactions if effects upon environmental vectors such as water and air are not mitigated.	Potential interactions with residual effects on environmental vectors. This has been mitigated by provisions which have been integrated into the Plan as varied, including those relating to sustainable mobility and infrastructural provision.	РНН1
Soil	 Contributes towards protection of soil – due to increased utilisation of lands within existing development boundaries and use of existing utilities and brownfield sites. Contributes towards protection of soil with respect to the provision of water services. 	Damage to the hydrogeological and ecological function of the soil resource.	 Loss of an extent of soil function arising from the replacement of semi- natural land covers with artificial surfaces. 	S1
Water	Contributes towards protection and management of ground and surface waters due to facilitating development within established and serviced settlement centres.	 Adverse impacts upon the status of water bodies arising from changes in quality, flow and/or morphology. Increase in the risk of flooding. 	 Increased loadings as a result of development to be in compliance with River Basin Management Plan. Flood related risks remain due to uncertainty with regard to extreme weather events. 	W1 W2 W3

Environmental Component	Significant Positive Effect, likely to occur	Potential Effect, if unmitigated	Residual Adverse Effects	Relevant SEO Codes
Material Assets	Allows for use of planned infrastructure including water services infrastructure and transport infrastructure. Makes use of existing water services and drainage infrastructure.	 Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts). Failure to comply with drinking water regulations and serve new development with adequate drinking water that is both wholesome and clean (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts). Increases in waste levels. 	Residual wastes to be disposed of in line with higher level waste management policies.	M1 M2
Air and Climatic Factors	 Facilitates contribution towards a shift from car to more sustainable and non-motorised transport modes. Facilitates contribution towards reducing congestion and associated adverse effects on air quality. Facilitates contribution towards reductions in travel related greenhouse gas and other emissions to air. 	 Emissions to air including greenhouse gas emissions and other emissions. Climate adaptation interactions. 	 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 mobility. 	C1
Cultural Heritage	Contributes towards protection of cultural heritage in wider region by facilitating development within existing settlements.	Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities.	Potential alteration to the context and setting of architectural heritage however these will occur in compliance with legislation. Potential alteration to the context and setting of archaeological heritage however this will occur in compliance with legislation. Potential loss of unknown archaeology however this loss will be mitigated by measures integrated into the Plan as varied.	CH1 CH2
Landscape	Contributes towards protection of wider landscape by facilitating development within existing settlements.	Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape, especially with regard to the County's landscapes which are most valuable and most sensitive to change and protected focal points and views.	The Plan as varied contributes towards the protection of landscape designations. The County's landscapes will change overtime as a result of natural changes in vegetation cover combined with new developments.	L1

8.3 Appropriate Assessment

A Stage 2 Appropriate Assessment (AA) has been undertaken alongside the preparation of Variation 2 (b).

The requirement for AA is provided under the EU Habitats Directive (Directive 1992/43/EEC).

The preparation of the Variation, SEA and AA has taken place concurrently and the findings of the AA have informed both the Variation and the SEA. All recommendations made by the AA were integrated into the Variation.

8.4 Strategic Flood Risk Assessment

A Strategic Flood Risk Assessment (SFRA) has been undertaken alongside the preparation of the Variation. The requirement for SFRA is provided under 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (DEHLG and OPW, 2009).

The preparation of the Variation, SEA and SFRA has taken place concurrently and the findings of the SFRA have informed both the Variation and the SEA. The SFRA has facilitated the integration of flood risk management considerations into the Variation.

8.5 Interrelationship between Environmental Components

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

Likely significant effects on environmental components which are identified include those which are interrelated; implementation of the Variation will not affect the interrelationships between these components. The presence of significant interrelationships between environmental components is identified on Table 8.3.

Table 8.3 Presence of Interrelationships between Environmental Components

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

8.6 Vision

Variation text	Likely to <u>Improve</u> 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
The Gaeltacht area is a unique and a special place and it is important that it retains that distinctive cultural heritage and natural beauty which is of National significance through the principles of sustainable development, whilst meeting the needs and aspirations of both the residents' and visitors alike. Achieving the objectives of the Galway County Development Plan in order to sustain and develop the local economy and improve the quality of life for local residents.	PHH1 S1 W1 W2 W3 M1 M2 M3 C1	PHH1 S1 W1 W2		

Assessment Commentary:

The evaluation against Strategic Environmental Objectives (SEOs) provided for the Variation's high-level Vision is consistent with that provided for the selected alternative development strategy in Section 7. The interactions with SEOs reflect the effects detailed on Table 8.2.

The vision primarily contributes towards the sustainable development and the protection and management of the environment that is already contributed towards by the existing Plan. The Vision recognises the uniqueness and specialness of the Gaeltacht area and the need to retain its distinctive cultural heritage and natural beauty.

8.7 An Gaeltacht Objectives

Variation text	Likely to <u>Improve</u> 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
Objectives GL1 Linguistic and Cultural Heritage of An Gaeltacht	B1 B2 B3 B4	B1 B2 B3 B4	·	
It shall be an objective of the Council to protect the linguistic and cultural heritage of the Gaeltacht and to	PHH1 S1 W1 W2	PHH1 S1 W1 W2		
promote Irish as a community language.	W3 M1 M2 M3 C1	W3 M1 M2 M3 C1		
Objective GL2 Tourism Developments in the Gaeltacht	CH1 CH2 L1	CH1 CH2 L1		
(a) It is an objective of the Council to encourage and facilitate the development of the tourism potential of the				
Gaeltacht areas 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, including ensuring that				
any new projects, such as greenways, are a suitable location from ecological sensitivities, such as riparian zones.				
Objective GL3 Economic Development in the Gaeltacht				
To promote and support the developments that contribute to the economic development of the Gaeltacht in a				
sustainable manner at suitable locations within the Gaeltacht area.				
Objective GL4 Brownfield Development and Vacancy				
Encourage the redevelopment of existing brownfield sites within established villages in the Gaeltacht area in				
order to maximise the sustainable regeneration of underutilised/vacant lands and/or buildings for potential				

commercial, cultural, retail, community and residential developments.

Objective GL5 Niche markets in the Gaeltacht

Promote and facilitate the sustainable development of creative industry centres and artistic initiatives in suitable locations in the Gaeltacht area.

Objective GL6 Community Development Framework Guidance for Oileáin Árainn

Support and facilitate the measures where possible that are included in the Community Development Framework Guidance (Included in Appendix 1).

Objective GL7 Built Heritage in the Gaeltacht

Promote the sustainable development of the built heritage of the Galway Gaeltacht to heritage best practice and the protection of its unique elements.

Objective GL8 Natural Heritage in the Gaeltacht

Promote the sustainable development of green infrastructure within settlements of the Gaeltacht and seek its integration in development proposals as appropriate. In order to protect light sensitive species such as bats, lighting fixtures should provide only the amount of light necessary for personal safety and should be designed so as to avoid creating glare or emitting light above a horizontal plane.

Objective GL9 Infrastructure in the Gaeltacht

(a)Promote the sustainable development of infrastructure projects and the improvement of the infrastructure network in the Galway Gaeltacht with close co-operation with the relevant stakeholders;

(b)Support the preparation and implementation of public realm plans and other related initiatives for villages in the Galway Gaeltacht as resources permit.

Objective GL10-Language Enurement Clause for Two or More Houses in District D(Cois Fharriage)

Language Enurement Clause will be applied on a portion of residential units in development of two or more units in identified settlements in District D(Cois Fharriage). The proportion of homes to which a language enurement clause will be a minimum of 80% or to the proportion of persons using Irish Language on a daily basis, in accordance with the latest published Census whichever is greater.

Assessment Commentary:

The evaluation against Strategic Environmental Objectives (SEOs) provided for the An Gaeltacht Objectives is consistent with that provided for the selected alternative development strategy in Section 7. The interactions with SEOs reflect the effects detailed on Table 8.2.

Although **Objective GL1 "Linguistic and Cultural Heritage of An Gaeltacht"** will contribute towards the continuing sustainable development of the Gaeltacht it will not result in significant environmental interactions as it is focused upon the non-tangible linguistic heritage of the Gaeltacht.

Objective GL2 "Tourism Developments in the Gaeltacht Objective" further contributes to the overall strategy for tourism related development that is already in place within the existing County Development Plan. Objective GL2 (b) provides for the provision of certain infrastructure including walking and cycling infrastructure. The development of new and existing walking and cycling infrastructure has the potential to contribute towards a better management of tourism in sensitive areas and thereby benefitting various environmental components including habitats at certain locations. The reference to avoid significant effects would contribute towards beneficial effects upon the protection/management of all environmental components. As with other developments and uses, those related to tourism and recreation would present the potential for significant adverse environmental effects to arise with regard to all environmental components. The development of walkways, cycleways, trails and routes presents a variety of potentially adverse effects (upon environmental components including soil, water, landscape, cultural heritage and emissions to air and waste) that would be likely to arise from both the construction and operation of such developments and/or their ancillary infrastructure. These types of infrastructure are often constructed in ecologically and visually sensitive areas adjacent to the banks of rivers and streams. Potential adverse effects would be mitigated both by measures which have been integrated into Objective GL 2, the Plan as varied (see Section 9) and measures arising from lower tier assessments (including those for the preparation of lower tier strategies, plans or programmes).

The economic development provisions provided for by **Objective**" are consistent with the framework for economic development in County Galway that is already provided for by the County Plan.

These provisions contribute towards both sustainable development and the protection and management of the environment, for example:

- GL3 "suitable locations"
- ECN 10 "sustainable development"

In combination with other provisions integrated into the Plan as varied, these objectives would help to provide a concentration of economic growth within existing settlement centres and appropriate growth in rural areas. This approach would contribute towards sustainable mobility and efficient use of resources. The construction and operation of all economic development has the potential to result in adverse effects upon all environmental components however these effects have been mitigated by provisions which have been integrated into the Plan as varied, including those which are identified in Section 9 of this report. The potential adverse effects (if unmitigated) are consistent with those detailed on Table 8.2.

Objective GL4 "Brownfield Development and Vacancy" encourages sustainable regeneration of underutilised/vacant lands and/or buildings. By providing for development within established villages and facilitating the use of existing utilities and brownfield sites, this objective would be likely to contribute towards a reduced need to develop more sensitive, undeveloped areas elsewhere in the wider Gaeltacht area that are further from existing settlements and less well serviced. This would be likely to result in significant positive environmental effects on environmental components consistent with those detailed on Table 8.2.

Regarding GL6 "Community Framework Guidance for Oileáin Árainn" the Framework Guidance is an advisory document that expands on how the sustainable development for island communities could be achieved in compliance with the provision of the County Development Plan. The framework provided by the County Development Plan regarding the development of communities encompasses various sectors including requires development from various sectors including community, heritage and culture, housing, roads and transportation, infrastructure and services, tourism and economic development and natural and built heritage and conservation. It is intended to guide the community and developers in their consideration of future development proposals - communities and developers may investigate the feasibility of measures outlined in the Framework Guidance. The Framework Guidance does not define rules and procedures that must be complied with, rather it provides guidance on how the provisions of the County Development Plan could be achieved. Future developments at Oileáin Árann are required to comply with the existing provisions of Galway County Development Plan 2015-2021 (as amended), including those relating to environmental protections and management.

Protection and management of the environment are the primary focus of **GL7 "Built Heritage in the Gaeltacht"** and **GL8 "Natural Heritage in the Gaeltacht"** with associated positive effects consistent with those detailed on Table 8.2.

GL9 "Infrastructure in the Gaeltacht" promotes the sustainable development of infrastructure projects and the improvement of the infrastructure network in the Galway Gaeltacht and is consistent with the framework for infrastructure provision included within the existing development plan. The provision of all necessary infrastructure in advance of development would facilitate both of the following:

- The achievement of balanced and sustainable development as set out by higher level planning objectives; and
- Appropriate levels of environmental protection and management especially with respect to the provision of water services (and associated positive effects on the status of waters, ecology and human health) and the provision of transport infrastructure integrated with land use planning and associated interactions with sustainable mobility, emissions and energy usage.

The preparation and implementation of public realm plans and other related initiatives for villages in the Galway Gaeltacht could contribute towards the success of these centres with associated environmental benefits arising from consolidation of villages and urban regeneration. Public realm plans would have to comply with requirements relating to environmental assessment as appropriate.

Objective GL10-Language Enurement Clause for Two or More Houses in District D (Cois Fharriage)

Language Enurement Clause will be applied on a portion of residential units in development of two or more units in identified settlements in District D (Cois Fharriage). The proportion of homes to which a language enurement clause will be a minimum of 80% or to the proportion of persons using Irish Language on a daily basis, in accordance with the latest published Census whichever is greater.

8.8 Land Use Zoning and Development Objectives for An Cheathrú Rua, An Spidéal and Baile Chláir

Variation text	Likely to Improve		Probable Conflict	No Likely
	status of SEOs	with status of SEOs -	with status of SEOs-	interaction
		likely to be mitigated	unlikely to be fully	with status of
			mitigated	SEOs
The Variation includes various land use zoning objectives which have been applied to three settlements - An	B1 B2 B3 B4	B1 B2 B3 B4		
Cheathrú Rua, An Spidéal and Baile Chláir - in a way that is consistent with the selected alternative for each	PHH1 S1 W1 W2	PHH1 S1 W1 W2		
settlement (for detailed land use zoning objectives please refer to Variation). Related provisions include a	W3 M1 M2 M3 C1	W3 M1 M2 M3 C1		
sequential approach to zoning and a zoning matrix (DM Guideline CSB1 Land Uses). The detailed text associated		CH1 CH2 L1		
with the Land Use Zoning Objectives is provided in the Variation document and its application is shown on Figure				
7.1, Figure 7.2 and Figure 7.3 above. Land Use Zoning Objectives are as follows:				
Objective CSB 1 – Village Centre (VC)				

- Objective CSB 2– Residential (R)
- Objective CSB 3 Community Facilities (CF)
- Objective CSB 4 Open Spaces/Recreation & Amenity (OS)
- Objective CSB 5 –Tourism
- Objective CSB 6 Industrial (I)
- Objective CSB 7 Business & Enterprise (BE)
- Objective CSB 8 Public Utilities (PU)
- Objective CSB 9 Transport Infrastructure (TI)
- Objective CSB 10 Constrained Land Use Zone (CL)
- Objective CSB 11 Flood Risk Areas and Land Use Zones
- Objective CSB 12 Land Use Zoning Matrix
- Objective CSB 13 Residential Densities

Objective DO 1 Phased Residential Development

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 the village. Residential (Phase 2) lands are generally not developable within the lifetime of these settlement plans, with the exception of the following developments, which may be considered by the Planning Authority within the lifetime of these plans subject to a suitable case being made for the proposal:

- 1. Single house developments for family members on family owned lands;
- 2. Non-residential developments that are appropriate to the site context, any existing residential amenity and the existing pattern of development in the area;
- 3. Where it is apparent that Residential (Phase 1) lands cannot or will not be developed within the plan period, residential development may be considered in a phased manner on some Residential (Phase 2) lands.

The above exceptions will be subject to compliance with the Core Strategy in the Galway County Development Plan, the policies and objectives in these plans, the principles of proper planning and sustainable development and to meeting normal planning, access and servicing requirements. Developments will only be permitted where a substantiated case has been made to the satisfaction of the Planning Authority and the development will not prejudice the future use of the lands for the longer term growth needs of the village.

Objective DO 2 Language Enurement Clause for Two or More Houses in An Cheathrú Rua, An Spidéal and Baile Chláir

- 1). A Language Enurement Clause will be applied on a portion of residential units in development of two or more units in An Cheathrú Rua and An Spidéal. The proportion of homes to which a language enurement clause will be a minimum of 80% or to the proportion of persons using Irish Language on a daily basis, in accordance with the latest published Census whichever is greater;
- 2). A Language Enurement Clause will be applied on a portion of residential units in development of two or more units in Baile Chláir. The proportion of homes to which a language enurement clause will be a minimum of 20% or to the proportion of persons using Irish Language on a daily basis, in accordance with the latest published Census whichever is greater.

Objective DO 3 - Lands for Community & Amenity Facilities

Ensure that there are adequate lands zoned and serviced lands to cater for the establishment, improvement or expansion of educational, community, recreation and amenity facilities within An Cheathrú Rua, An Spidéal and Baile Chláir plan areas. This will include the following:

- a) Reserve lands for existing community facilities and for the expansion and provision of additional community facilities adjacent to existing community facility lands;
- b) Reserve lands for the provision of community facilities adjacent to large blocks of residentially zoned lands to meet the needs of existing and future residents.

Objective DO 4 Business/Enterprise & Industrial Development

Facilitate and encourage the establishment of business, enterprise and industry developments that are considered compatible with surrounding uses, on suitably zoned and serviced sites within An Cheathrú Rua An Spidéal and Baile Chláir plan areas. Where such uses are developed adjacent to residential areas or community facilities, buffer zones shall be provided as well as adequate screening in the form of planting and landscaping, as appropriate. The Business and Enterprise (BE) and Industrial (I) zonings will be the primary focus for such uses, subject to the guidance provided in DM Guideline CSB1 – Land Use Zoning Matrix.

Objective DO 5 Retail Development

Support the development of appropriate types, scales and patterns of retail development in suitable locations within An Cheathrú Rua, An Spidéal and Baile Chláir plan areas and with high quality designs that:

- Support the vitality and viability of the existing village centres and associated main streets and/or do not undermine their vitality and viability.
- Protect investment in strategic roads and infrastructure and that are easily accessible, particularly in terms of public transport.
- Comply with the Guidelines for Planning Authorities-Retail Planning 2012 (and any updated/superseding document) including the need for a sequential approach to retail development, the policies and objectives of any future Retail Strategy for Galway and the guidance set out in the Retail Design Manual A Good Practice Guide Companion Document to the Guidelines for Planning Authorities Retail Planning 2012 (and any updated/superseding document).
- Contribute to the creation of a high quality retail environment.

The Village Centre (VC) zonings will remain the primary focus for the location of new retail 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/superseding document) and will require Retail Impact Assessments, including details of the sequential approach, and Design Statements and Transport Impact Assessments, where appropriate, for retail developments in accordance with the Retail Planning Guidelines, the Retail Design Manual and DM Guideline ED1 and ED2 contained in Chapter 13 of the Galway County Development Plan.

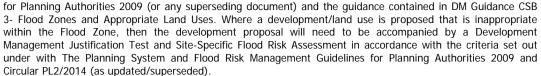
Objective DO 6 Flood Risk Management and Assessment

Ensure the implementation of the DoEHLG/OPW publication The Planning System and Flood Risk Management Guidelines for Planning Authorities 2009 (or any updated/superseding document) in relation to flood risk management within An Cheathrú Rua, An Spidéal and Baile Chláir plan areas. This will include the following:

- 1. Avoid, reduce and/or mitigate, as appropriate in accordance with The Planning System and Flood Risk Management Guidelines for Planning Authorities 2009, the risk of flooding within the flood risk areas indicated on Maps—Flood Risk Management, including fluvial, coastal/tidal, pluvial and groundwater flooding, and any other flood risk areas that may be identified during the period of the Plan or in relation to a planning application.
- 2. 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 for Planning Authorities 2009, (or any superseding document) and Circular PL2/2014 (as updated/superseded). 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.
- 3. Where certain measures proposed to mitigate or manage the risk of flooding associated with new developments are likely to result in significant effects to the environment or European sites downstream, such measures will undergo environmental assessment and Appropriate Assessment, as appropriate.
- 4. 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.

Objective DO 7 Flood Zones and Appropriate Land Uses

1. 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



2. Ensure that development proposals in areas identified in An Cheathrú Rua, An Spidéal and Baile Chláir plan areas within Flood Zone C that may be subject to potential flood risk from other sources (e.g. areas of indicative pluvial/groundwater flooding and identified alluvium soil areas) are required to be accompanied by a Site Specific Risk Assessment in accordance with the criteria set out under The Planning System and Flood Risk Management Guidelines for Planning Authorities (2009) and Circular PL02/2014 (as updated/superseded).

For development proposals in all other areas of Flood Zone C, the developer should satisfy him or herself that the level of flood risk is appropriate to the development being proposed. Where, in the opinion of the Planning Authority, the development proposal is of such a scale that flood risk must be considered (e.g. creation of significant areas of new hard standing which could significantly increase run-off), the Planning Authority may request that a site-specific flood risk assessment be carried out in accordance with the criteria set out under The Planning System and Flood Risk Management Guidelines for Planning Authorities (2009) and Circular PL 2/2014 (as updated/superseded).

Objective DO 8 Specific Flood Risk Locations

Planning applications on lands in An Cheathrú Rua, An Spidéal and Baile Chláir, identified within pluvial PFRA areas outside of Indicative Flood Zone A on Flood Maps for An Cheathrú Rua, An Spidéal and Baile Chláir shall be accompanied by a Site Specific Flood Risk Assessment that corresponds with that outlined under Chapter 5 'Flooding and Development Management' of The Planning System and Flood Risk Management Guidelines for Planning Authorities 2009). Such assessments shall be prepared by suitably qualified experts with hydrological experience and shall quantify the risks and effects of any necessary mitigation, together with the measures needed or proposed to manage residual risks.

Objective DO 9 Infrastructure

- (a). Support the development of infrastructure projects in relation to the local road network, water and waste water that are listed in Chapter 5 (Roads and Transportation) & Chapter 6(Water, Wastewater, Waste Management & Extractive Industry) of the Galway County Development Plan which relate to An Cheathrú Rua, An Spidéal and Baile Chláir plan areas;
- (b). Support the preparation and implementation of a public realm plan for An Cheathrú Rua, An Spidéal and Baile Chláir plan areas.

Objective DO 10 An Spidéal Demesne

It is an objective of Galway County Council to require that an Action Area Plan is prepared for any development of An Spidéal Demesne taking into account the environmental sensitivities of the area and the reflection of the unique setting of these lands.

Objective DO11 Access Points to Lands for Development

Reserve access points to developable lands/ backland areas as indicated on Land Use Zoning maps for An Cheathrú Rua, An Spidéal and Baile Chláir.

Objective DO12 Opportunity Sites in relation to An Cheathrú Rua, An Spidéal and Baile Chláir

To encourage and support the appropriate and sustainable development of lands identified in the table below as development opportunity sites within the land use zonings maps for the plan areas.

Assessment Commentary:

The evaluation against Strategic Environmental Objectives (SEOs) provided for the Land Use Zoning and Development Objectives – and related provisions including phasing – for An Cheathrú Rua, An Spidéal and Baile Chláir is consistent with that provided for the selected alternative development strategy in Section 7. The interactions with SEOs reflect the effects detailed on Table 8.2. The application of the zoning to the three settlements, in combination with other provisions from the Plan as varied, would ensure that development is served by infrastructure, including infrastructure that is already in place, and services, including those relating to community facilities. The approach followed also ensures that open space and recreation lands are preserved and that flood zones are avoided for incompatible land

use zonings.

By providing for new residential development over a relatively small number of sites that are already or most easily served by infrastructure and could serve demand for new development, the approach for Phased Residential Development that is detailed in the text (**Objective DO 1**) and illustrated on accompanying land use zoning maps, would result increase significant positive effects arising and decrease the degree of potential conflicts (see Table 8.2) for details of effects.

Although Objective DO 2 will contribute towards the continuing sustainable development of the Gaeltacht it will not result in significant environmental interactions as it is focused upon spoken language.

The approach to community and amenity facilities, business/enterprise and industrial, retail development and opportunity sites (for various uses) provided for **Objectives DO 3, 4, 5 and 12** is consistent with the framework for development in County Galway that is already provided for by the County Plan. These provisions contribute towards both sustainable development and the protection and management of the environment, for example:

- Objective DO 3 "serviced lands"
- Objective DO 4 "suitably zoned and serviced site.... buffer zones shall be provided as well as adequate screening in the form of planting and landscaping"
- Objective DO 5 "appropriate types, scales and patterns of retail development ... with high quality designs"
- Objective DO 12 ""

In combination with other provisions integrated into the Plan as varied, these objectives would help to provide a concentration of economic, community and residential growth within existing settlement centres and appropriate growth in rural areas. This approach would contribute towards sustainable mobility and efficient use of resources. The construction and operation of all development has the potential to result in adverse effects upon all environmental components however these effects have been mitigated by provisions which have been integrated into the Plan as varied, including those which are identified in Section 9 of this report. The potential adverse effects (if unmitigated) are consistent with those detailed on Table 8.2.

Objectives DO 6, 7 and 8 provide for an approach to flood risk management that is consistent with the requirements of the Flood Risk Management Guidelines and Circular PL 2/2014. This approach would facilitate the appropriate management and sustainable use of flood risk areas and contribute towards the protection of human health, ecology and material assets. The approach is supported by the application of land use zoning, including that relating to **Land Use Zoning Objectives CSB 10** – Constrained Land Use Zone (CL) and **Objective CSB 11** – Flood Risk Areas and Land Use Zones

Objective DO 9 supports the development of infrastructure projects in relation to the local road network, water and waste water that are listed as part of provisions included within the existing Plan. The provision of all necessary infrastructure in advance of development would facilitate both of the following:

- The achievement of balanced and sustainable development as set out by higher level planning objectives; and
- Appropriate levels of environmental protection and management especially with respect to the provision of water services (and associated positive effects on the status of waters, ecology and human health) and the provision of transport infrastructure integrated with land use planning and associated interactions with sustainable mobility, emissions and energy usage.

The preparation and implementation of public realm plans and other related initiatives for villages in the Galway Gaeltacht could contribute towards the success of these centres with associated environmental benefits arising from consolidation of villages and urban regeneration. Public realm plans would have to comply with requirements relating to environmental assessment as appropriate.

It is noted with respect to local indicative roads, including those within the settlements of An Spidéal and An Cheathrú Rua, **Land Use Zoning Objective CSB 9** – Transport Infrastructure (TI) requires certain indicative roads be subject to needs assessment and detailed corridor and route selection processes taking into account, inter alia, environmental constraints and opportunities.

Objective DO 10 would contribute towards the protection and management of environmental sensitivities at An Spidéal Demesne, including those relating to ecology, cultural heritage and the landscape.

Objective DO11 would help to facilitate sustainable regeneration of underutilised/vacant lands and/or buildings. By helping to facilitate development within existing settlements and facilitating the use of existing utilities and brownfield sites, this objective would be likely to contribute towards a reduced need to develop more sensitive, undeveloped areas elsewhere in the wider Gaeltacht area that are further from existing settlements and less well serviced. This would be likely to result in significant positive environmental effects on environmental components consistent with those detailed on Table 8.2.

The approach provided by the Land Use Zoning and Development Objectives and assessed above is supported by three Development Management Guidelines as follows:

- DM Guideline CSB1 "Land Uses" that provides a Land Use Matrix table to accompany the Land Use Zoning and associated objectives for An Cheathrú Rua, An Spidéal and Baile Chláir.
- DM Guideline CSB 2 "Development Densities" that details development density guidance that indicates the range of densities generally considered appropriate in the various land use zones and in

different residential locations within the Plan area.

• DM Guideline CSB 3— Flood Zones and Appropriate Land Uses that provides additional detail on the types of land uses appropriate in Flood Zones A, B and C

8.9 Assessment of Proposed Material Alterations

17 Proposed Material Alterations were subject to SEA and Appropriate Assessment (AA) Screening under Section 13 (6) (aa) of the Planning and Development Act, 2000 (as amended).

The SEA Screening Report for the Proposed Material Alterations concluded that:

"Taking into account the measures that have already been integrated into the Proposed Variation 2(b) and associated County Development Plan that contribute towards environmental protection, environmental management and sustainable development, it is determined that all potential effects arising from all Proposed Material Alterations will be mitigated so as not to be significant."

The Strategic Flood Risk Assessment (SFRA) process that was undertaken alongside the preparation of the Variation and associated SEA informed the analysis contained in the SEA Screening Report for the Proposed Material Alterations.

The AA Screening Report for the Proposed Material Alterations concluded that:

"...the Proposed Material Alterations to Variation No. 2(b) to the Galway County Development Plan 2015-2021 are not foreseen to give rise to any significant adverse effects on designated European sites³³, alone or in-combination with other plans or projects. This evaluation is made in view of the conservation objectives of the habitats or species for which these sites have been designated. Consequently, a Stage 2 AA is not required for the Proposed Material Alterations."

Notwithstanding these conclusions, further commentary is provided here on Material Alterations No. MA1, MA3 and MA4, all of which relate to An Spidéal. The lands subject to these Material Alterations were zoned, taking into account proper planning and sustainable development, and included within Proposed Variation No. 2 that was placed on public display in December 2017. After public display the Elected Members decided to propose, inter alia, Material Alterations to the land use zoning objectives for MA1, MA3 and MA4 lands contrary to the recommendations of the Chief Executive. The Proposed Material Alterations were subject to SEA and AA Screenings³⁴ and placed on public display alongside the findings of the screening exercises. In the interests of the proper planning and sustainable development of An Spidéal, it was recommended that the Variation was made with zonings for MA1, MA3 and MA4 lands as provided for by the original Proposed Variation that was placed on public display in December 2017. The Variation was made with zonings for MA1 lands as provided for by the original Proposed Variation that was placed on public display in December 2017 and with zonings for MA3 and MA4 lands as per the Proposed Material Alterations.

The Land Use Zoning Objectives at Plan level indicate the Council's intention for land uses at different locations, subject to compliance with other Plan provisions. Land Use Zoning Objectives relate to the land use zoning matrix that details the suitability of various uses tender each Objective – for example: both "Apartments" and "Recreational/Cultural Activities" are "Open for Consideration" under the "Residential" Land Use Zoning Objective; and both "Buildings for the Health, Safety & Welfare of the Public" and "Cultural/Recreational Building" are "Open for Consideration" under the "Open Spaces/Recreation & Amenity" Land Use Zoning Objective.

At project level, proposals for development that satisfy the relevant Land Use Zoning Objective must demonstrate compliance with the written provisions contained within both the Variation (the Gaeltacht Plan) and the Plan to which the Variation is being made. These written provisions include those relating to the protection and management of biodiversity and flora and fauna, including designated and non-designated habitats, and flood risk.

³³ Except as provided for in Section 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.

³⁴ The SEA Screening Report analyses each of the Material Alterations and provides detailed commentary on how potential conflicts will be mitigated. For each of Proposed Material Alterations MA1, MA3 and MA4, the SEA Screening Report identifies that "All developments would be required to comply with the other provisions already included in the existing Plan and in the Proposed Variation..." These measures include extensive provisions contained within both the Proposed Variation and the County Development Plan relating to the protection of archaeological and architectural heritage, landscape and ecology and flood risk management.

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, as varied.

Various environmental sensitivities and issues have been communicated to the Council through the various SEA, AA and SFRA processes undertaken for both the original 2015 Plan, Variation No. 1 and this Variation. 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.

9.2 Integration of Environmental Considerations

All recommendations made by the SEA, AA and SFRA processes were integrated into the Plan (as varied).

Table 9.1 links key mitigation measure(s) - which have been integrated into the Plan (as varied) and the Variation - to the likely significant effects of implementing the Plan, if unmitigated. The integration of these measures into the Plan occurred over a number of iterations and was informed by, inter alia, various communications through the SEA, AA and SFRA processes.

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.

The reference codes are those which accompany the relevant measures in the Plan and Variation.

Table 9.1 Integration of Environmental Considerations

Likely Significant Effect, if unmitigated	Mitigation Measures, including:
Arising from both construction and operation of development and associated infrastructure: • Loss of/damage to biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species, listed species, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna; • Habitat loss, fragmentation and deterioration, including patch size and edge effects; and • Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species.	 Measures from the Variation Objective GL2 Tourism Developments in the Gaeltacht Objective GL8 Natural Heritage in the Gaeltacht Objective DO 10 An Spidéal Demesne Measures from the Plan as varied Policies NHB 1, NHB 2, NHB 3, NHB 5, NHB 6, NHB 7 and NHB 8 Objectives DS 6, DS 9, EQ1, EQ 4, ICT 1, NHB 1, NHB 2, NHB 4, NHB 5, NHB 6, NHB 7, NHB 8, NHB 10, NHB 11, NHB 13, AFF 6 and DS10 Also see various measures providing for populations in rural and supporting areas.
Potential interactions if effects upon environmental vectors such as water and air are not mitigated	Measures from the Variation Objective CSB 8– Public Utilities Measures from the Plan as varied Policy CC 8 Objectives TI 12 and EQ 2 Also see measures related to soil, water quality, flooding,
Damage to the hydrogeological and ecological function of the soil resource Adverse impacts upon the status of water bodies arising from changes in quality, flow and/or morphology Increase in the risk of flooding	waste water treatment and drinking water supply and quality. Measures from the Plan as varied Objective NHB12 Also see measures related to water quality and waste water treatment. Measures from the Variation Objective CSB10- Constrained Land Use Zone Objective CSB 11 - Flood Risk Areas and Land Use Zone Objective DO 6 - Flood Risk Management and Assessment Objective DO 7 - Flood Zones and Appropriate Land Uses
Failure to provide adequate and	 DM Guideline CSB 3 – Flood Zones and Appropriate Land Uses Measures from the Plan as varied Policies NHB 4, AFF 5, FL 1, FL 2, FL 3, FL 4 and FL 5 Objectives NHB 3, NHB 8, NHB 10, NHB12, EQ1, AFF 5, AFF 6, AFF9, CS 4, WS 1, WS 2, WS 7, WS 9, WS 11, WW 1, FL 1, FL 2, FL 3, FL 4, FL 5, FL 6, DS 7, DS 8 and DS 9 and RA 1 Measures from the Variation
appropriate waste water treatment (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts) Failure to comply with drinking water regulations and serve new development with adequate drinking water that is both wholesome and clean (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts) Increases in waste levels	 Objective GL9 Infrastructure in the Gaeltacht Objective DO 9 - Infrastructure Measures from the Plan as varied Policies WS 1 WS 2 WS 3 WS 4 WS 5 WS 6 WW 1 WM1 WM2 Objectives WS 1, WS 2, WS 3, WS 4, WS 5, WS 6, WS 7, WS 8, WS 9, WS 10, WS 11, WS 12, WS 13, WS 14, WS 15, WW 1, WW 2, WW 3, WW 4, WW 5, WW 6, WW 7, WW 8, WW 10, WM 1, WM 2, WM 3, WM 4, WM 5, WM 6, CS 4, RHO -5 and EDT 5

Likely Significant Effect, if unmitigated	Mitigation Measures, including:	
Emissions to air including greenhouse gas emissions and other emissions. Climate adaptation interactions	Measures from the Variation Objective GL4 Brownfield Development and Vacancy Objective CSB 9 – Transport Infrastructure DM Guideline CSB 2 – Development Densities	
Climate adaptation interactions	 Measures from the Plan as varied Strategic Aims 6, 7 and 11 Policies CC 1, CC2, CC3, CC4, CC5, CC6, CC 7, TI 1, TI 2, TI 3 and TI 4 Objectives DS 1, DS 2, DS 3, DS 8, CS 3, CS 5, TI 1, TI 2, TI 3, TI 4, TI 16, TI 17, TI 18, TI 19, TI 20, TI 21, DS 8, CC1, CC 2, CC3, CC 4 and CC5 	
Effects on entries to the Record of Monuments and Places and other archaeological heritage	Measures from the Variation Objective GL7 Built Heritage in the Gaeltacht	
Effects on entries to the Records of Protected Structures, Architectural Conservation Areas and other architectural heritage Occurrence of adverse visual	 Measures from the Plan as varied Policies AH 1, AH 2, ARC 1, ARC 2, ARC 3, ARC 4 and ARC 5 Objectives AH 1, AH 2, AH 3, AH 4, AH 5, AH 6, AH 7, AH 8, AH 9, AH 10, AH 11, ARC 1, ARC 2, ARC 3, ARC 4, ARC 5, ARC 6 and ARC 7 Measures from the Plan as varied 	
impacts	 Policy LCM 1 Objectives LCM 1, LCM 2, LCM 3, FPV 1 and WH 1 	

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 as varied.

Monitoring can enable, at an early stage, the identification of unforeseen adverse effects and the undertaking of appropriate remedial action

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.

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

The Monitoring Programme may be updated to deal with specific environmental issues - including unforeseen effects - as they arise. Such issues may be identified by the Council or identified to the Council by other agencies.

10.3 Sources

Measurements for indicators generally come from existing monitoring sources. Existing monitoring sources include those maintained by the Council and the relevant authorities e.g. the Environmental Protection Agency, the National Parks and Wildlife Service and the Central Statistics Office.

Internal monitoring of the environmental effects of grants of permission in the Council will provide monitoring of various indicators and targets on a *grant of permission* basis.

The likely significant effects of development proposals on environmental sensitivities are further determined during the development management process. By documenting this determination - e.g. whether a proposed development will impact upon a Protected Structure, for example - while granting permissions, or at a later date, the requirement to monitor the effects of implementing the Plan as varied can be achieved.

Where significant effects - including positive, negative, cumulative and indirect - have the potential to occur upon, for example, entries to the RMP, entries to the RPS or ecological networks as a result of the undertaking of individual projects or multiple individual projects such instances should be identified and recorded and should feed into the monitoring evaluation.

10.4 Reporting

Article 10 of the SEA Directive requires Member States to monitor the significant environmental effects of the implementation of plans "in order, inter alia, to identify at an early stage unforeseen adverse effects and to be able to undertake appropriate remedial action." Existing monitoring arrangements may be used if appropriate, to avoid duplication of monitoring³⁵.

A stand-alone Monitoring Report on the significant environmental effects of implementing the County Development Plan (including Variation 2b) will be prepared in advance of the review of the County Development Plan.

35

³⁵ Chapter 7 Implementation of SEA Directive (2001/42/EC): Assessment of the Effects of Certain Plans and Programmes on the Environment Guidelines for Regional Authorities and Planning Authorities. DoEHLG 2004

10.5 Thresholds and Corrective Action

Thresholds at which corrective action will be considered include:

- The occurrence of flood events;
- Court cases taken by the Department of Culture, Heritage and the Gaeltacht regarding impacts upon archaeological heritage including entries to the RMP;
- Complaints received from statutory consultees regarding avoidable environmental impacts resulting from development which is granted permission under the Plan as varied; and
- Fish kills.

Table 10.1 Selected Indicators, Targets and Monitoring Sources

Environmental	Selected Indicator(s)	Selected Target(s)	Source (Frequency)
Component Biodiversity, Flora and Fauna	B1: Conservation status of habitats and species as assessed under Article 17 of the Habitats Directive	B1: Maintenance of favourable conservation status for all habitats and species protected under national and international legislation to be unaffected by implementation of the Plan (as varied) ³⁶	 Internal monitoring of environmental likely significant effects of grants of permission (grant by grant). Department of Culture, Heritage and the Gaeltacht report of the implementation of the measures contained in the Habitats Directive - as required by Article 17 of the Directive (every 6 years). National Monitoring Report under Article 12 of the Birds Directive. Consultations with the NPWS (at monitoring evaluation - see Section 10.4).
	B2: Percentage loss of functional connectivity without remediation resulting from development provided for by the Plan (as varied)	B2: No significant ecological networks or parts thereof which provide functional connectivity to be lost without remediation resulting from development provided for in the Plan (as varied)	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). CORINE mapping resurvey (every c. 5 years).
	B3i: Number of significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites resulting from development provided for by the Plan (as varied) B3ii: Number of significant impacts on the protection of species listed on Schedule 5 of the Wildlife Act 1976.	B3i: Avoid significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites resulting from development provided for by the Plan (as varied) B3ii: No significant impacts on the protection of species listed on Schedule 5 of the Wildlife Act 1976	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Consultations with the NPWS (at monitoring evaluation - see Section 10.4).
	B4: Population of the county involved in land management	B4: Sustain the population of the county involved in land management	CSO Population Data (every c. 5 years).
Population and Human Health	PHH1: Occurrence (any) of a spatially concentrated deterioration in human health arising from environmental factors resulting from development provided for by the Plan, as identified by the Health Service Executive and Environmental Protection Agency	PHH1: No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan (as varied)	Consultations with EPA and Health Service Executive (at monitoring evaluation - see Section 10.4).
Soil	S1: Soil extent and hydraulic connectivity	S1: To minimise reductions in soil extent and hydraulic connectivity	Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).

³⁶ Except as provided for in Section 6(4) of the Habitats Directive, viz. There must be:

(a) no alternative solution available;

⁽a) no alternative solution available,(b) imperative reasons of overriding public interest for the plan to proceed; and(c) adequate compensatory measures in place.

Environmental	Selected Indicator(s)	Selected Target(s)	Source (Frequency)
Component			
ecological and chemical status) under the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (SI No. 272 of 2009) W1ii: Mandatory and Guide values as set by the EU Bathing Water Directive and transposing Bathing Water Quality Regulations (SI No. 79 of 2008) W2: Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC W3: Number of incompatible developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk wany surface W1ii: T values values as set by the EU W1ii: T values values and transposing Bathing Values values values values values and transposing Bathing Values	ecological and chemical status) under the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (SI No. 272 of 2009) W1ii: Mandatory and Guide values as set by the EU Bathing Water Directive and transposing Bathing	W1i: Not to cause deterioration in the status of any surface water or affect the ability of any surface water to achieve <i>good status</i> ³⁷ W1ii: To achieve - as a minimum - Mandatory values and, where possible, to achieve Guide values as set by the EU Bathing Water Directive and transposing Bathing Water Quality Regulations	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Data issued under the Water Framework Directive Monitoring Programme for Ireland. EPA Quality of Bathing Water in Ireland reports.
		(SI No. 79 of 2008) W2: Not to affect the ability of groundwaters to comply with Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Data issued under the Water Framework Directive Monitoring Programme for Ireland (multi-annual).
	W3: Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk in compliance with <i>The Planning System and Flood Risk Management Guidelines for Planning Authorities</i>	Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).	
Material Assets	M1: Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the Plan (as varied)	M1: All new developments granted permission to be connected to and adequately and appropriately served by waste water treatment over the lifetime of the Plan (as varied)	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).
	M2: Number of non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health as a result of implementing the Plan (as varied)	M2: No non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health as a result of implementing the Plan (as varied)	 EPA The Provision and Quality of Drinking Water in Ireland reports (multi-annual). EPA Remedial Action List (every quarter).
	M3i: Total collected and brought household waste M3ii: Packaging recovered (t) by self-complying packagers	M3i: Minimise increases in and, where possible, reduce household waste generation M3ii: Maximise increases in packaging recovered (t) by self-complying packagers	 EPA National Waste Reports EPA Ireland's Environment Reports
Air and Climatic Factors	C1: Percentage of population travelling to work, school or college by public transport or non-mechanical means	C1: An increase in the percentage of the population travelling to work, school or college by public transport or non-mechanical means	CSO Population Data (every c. 5 years).

Good status as defined by the WFD equates to approximately the following in the current national schemes of classification as set out by the EPA:
 Q4 in the biological classification of *rivers*;

Mesotrophic in the classification of lakes; and

Unpolluted status in the Assessment of Trophic Status of Estuaries and Bays in Ireland (ATSEBI).

SEA Environmental Report for Variation No. 2 (b) to the Galway County Development Plan 2015-2021

Environmental	Selected Indicator(s)	Selected Target(s)	Source (Frequency)
Component			
Cultural Heritage	CH1: Percentage of entries to the Record of Monuments and Places - including Zones of Archaeological Potential (and the context of the above within the surrounding landscape where relevant) – protected from adverse effects resulting from development which is granted permission under the Plan (as varied)	CH1: Protect entries to the Record of Monuments and Places - including Zones of Archaeological Potential (and their context of the above within the surrounding landscape where relevant) from adverse effects resulting from development which is granted permission under the Plan (as varied)	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Consultation with Department of Culture, Heritage and the Gaeltacht (at monitoring evaluation - see Section 10.4).
	CH2: Percentage of entries to the Record of Protected Structures and Architectural Conservation Areas and their context protected from adverse effects resulting from development which is granted permission under the Plan (as varied)	CH2: Protect entries to the Record of Protected Structures and Architectural Conservation Areas and their context from adverse effects resulting from development which is granted permission under the Plan (as varied)	 Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Consultation with Department of Culture, Heritage and the Gaeltacht (at monitoring evaluation - see Section 10.4).
Landscape	L1: Number of complaints received from statutory consultees regarding avoidable impacts on the landscape - especially with regard to the County's landscapes which are most valuable and most sensitive to change and protected focal points and views - resulting from development which is granted permission under the Plan (as varied)	L1: No developments permitted which result in avoidable impacts on the landscape - especially with regard to the County's landscapes which are most valuable and most sensitive to change and protected focal points and views - resulting from development which is granted permission under the Plan (as varied)	Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).

Appendix I Relationship with Legislation and Other 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.

European				
Directive/ Plan/ Programme	Highest Level Aim/ Purpose/ Objective	Lower level objectives, actions etc.	Relevant legislation etc. in Ireland	Relevance to the Plan as varied
EU Green Infrastructure Strategy	Aims to create a robust enabling framework in order to promote and facilitate Green Infrastructure (GI) projects	 Promoting GI in the main EU policy areas; Supporting EU-level GI projects; Improving access to finance for GI projects, and Improving information and promoting innovation 	not applicable	To cumulatively contribute towards – in combination with other users and bodies – 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	The UN Kyoto Protocol set of policy measures to reduce greenhouse gas emissions 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 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.	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	National Policy Position and final Heads of the Climate Action and Low-Carbon Development Bill	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
EU 2020 climate and energy package	 Binding legislation which aims to ensure the European Union meets its climate and energy targets for 2020 Aims to achieve a 20% reduction in EU greenhouse gas emissions from 1990 levels Aims to raise the share of EU energy consumption produced from renewable resources to 20% Achieve a 20% improvement in the EU's energy efficiency 	 Four pieces of complimentary legislation: Reform of the EU Emissions Trading System (EU ETS) to include a cap on emission allowances in addition to existing system of national caps Member States have agreed national targets for non-EU ETS emissions from countries outside the EU Meet the national renewable energy targets of 16% for Ireland by 2020 Preparing a legal framework for technologies in carbon capture and storage 	The Framework for Climate Change Bill European Communities (Renewable Energy) Regulations 2011 (SI No. 147/2011)	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
Habitats Directive (92/43/EEC)	 Promote the preservation, protection and improvement of the quality of the environment, including the conservation of natural habitats and of wild fauna and flora Contribute towards ensuring biodiversity through the conservation of natural habitats and of wild 	 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 	European Communities (Birds and Natural Habitats) Regulations 2011 (SI No. 477/2011) The Wildlife Act 1976 and	The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations

	•	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.	•	be maintained or, where appropriate, restored at 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	the Wildlife (Amendment) Act 2000	
Birds Directive (2009/147/EC)	•	Conserve all species of naturally occurring birds in the wild state including their eggs, nests and habitats Protect, manage and control these species and comply with regulations relating to their exploitation The species included in Annex I shall be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution	•	Preserve, maintain or re-establish a sufficient diversity and area of habitats for all the species of birds referred to in Annex 1. Preserve, maintain and establish biotopes and habitats to include the creation of protected areas (Special Protection Areas); ensure the upkeep and management in accordance with the ecological needs of habitats inside and outside the protected zones, re-establish destroyed biotopes and creation of biotopes Measures for regularly occurring migratory species not listed in Annex I is required as regards their breeding, moulting and wintering areas and staging posts along their migration routes. The protection of wetlands and particularly wetlands of international importance.	European Communities (Birds and Natural Habitats) Regulations 2011 (SI No. 477/2011)	The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations
European Union Biodiversity Strategy to 2020	•	Aims to halt or reverse biodiversity loss and speed up the EU's transition towards a resource efficient and green economy Halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, and restoring them in so far as feasible		Outlines six targets and twenty actions to aid European in halting the loss to biodiversity and eco-system services The six targets cover:	Actions for Biodiversity 2011-2016 Ireland's National Biodiversity Plan, 2011	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
The Clean Air for Europe Directive (2008/50/EC)	•	The CAFE Directive merges existing legislation into a single directive (except for the fourth daughter directive) Sets new air quality objectives for PM2.5 (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	•	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	Air Quality Standards Regulations 2011 (SI No. 180 of 2011) Arsenic, Cadmium, Mercury, Nickel and Polycyclic Aromatic Hydrocarbons in Ambient Air Regulations 2009 (SI No. 58 of 2009)	The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations

Fourth Daughter Directive (2004/107/EC) Noise Directive 2002/49/EC	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 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.	 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. The Directive requires competent authorities in Member States to: Draw up strategic noise maps for major roads, railways, airports and agglomerations, using harmonised noise indicators and use these maps to assess the number of people which may be impacted upon as a result of excessive noise levels; 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. The Directive does not set any limit value, nor does it prescribe the measures to be used in the action plans, which the action plans, 	Environmental Noise Regulations 2006 (SI No. 140 of 2006)	The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations
Floods Directive	Establishes a framework for the assessment and	which remain at the discretion of the competent authorities. • Assess all water courses and coast lines at risk from	European Communities	The Council is obliged to
(2007/60/EC)	 management of flood risks Reduce adverse consequences for human health, the environment, cultural heritage and economic activity associated with floods in the Community 	 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 Articles listed above Inform the public and allow the public to participate in planning process 	(Assessment and Management of Flood Risks) Regulations (SI 122/2010) European Union (Environmental Impact Assessment) (Flood Risk) Regulations 2012 (SI No. 470/2012)	comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations
Water Framework Directive (2000/60/EC)	 Establish a framework for the protection of water bodies to include inland surface waters, transitional waters, coastal waters and groundwater and their dependent wildlife and habitats Preserve and prevent the deterioration of water status and where necessary improve and maintain "good status" of water bodies Promote sustainable water usage The Water Framework Directive repealed the 	 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 	European Communities (Water Policy) Regulations 2003 (SI No. 722 of 2003) (as amended)	The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations
	following Directives: o The Drinking Water Abstraction Directive o Sampling Drinking Water Directive o Exchange of Information on Quality of	Register of Protected Areas Establish a programme of monitoring for surface water status, groundwater status and protected areas Recover costs for water services		

Groundwater Directive (2006/118/EC)	Surface Freshwater Directive Shellfish Directive Freshwater Fish Directive Groundwater (Dangerous Substances) Directive Dangerous Substances Directive Protect, control and conserve groundwater Prevent the deterioration of the status of all bodies of groundwater Implements measures to prevent and control groundwater pollution, including criteria for assessing good groundwater chemical status and criteria for the identification of significant and sustained upward trends and for the definition of starting points for trend reversals.	Meet minimum groundwater standards listed in Annex 1 of Directive Meet threshold values adopted by national legislation for the pollutants, groups of pollutants and indicators of pollution which have been identified as contributing to the characterisation of bodies or groups of bodies of groundwater as being at risk, also taking into account Part B of Annex II	European Communities Environmental Objectives (Groundwater) Regulations 2010 (SI No. 9/2010) (as amended)	The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations
Drinking Water Directive (98/83/EC)	 Improve and maintain the quality of water intended for human consumption Protect human health from the adverse effects of any contamination of water intended for human consumption by ensuring that it is wholesome and clean 	 Set values applicable to water intended for human consumption for the parameters set out in Annex I Set values for additional parameters not included in Annex I, where the protection of human health within national territory or part of it so requires. The values set should, as a minimum, satisfy the requirements of Article 4(1) (a) Implement all measures necessary to ensure that regular monitoring of the quality of water intended for human consumption is carried out, in order to check that the water available to consumers meets the requirements of this Directive and in particular the parametric values set in accordance with Article 5 Ensure that any failure to meet the parametric values set in accordance with Article 5 is immediately investigated in order to identify the cause Ensure that the necessary remedial action is taken as soon as possible to restore its quality and shall give priority to their enforcement action Undertake remedial action to restore the quality of the water where necessary to protect human health Notify consumers when remedial action is being undertaken except where the competent authorities consider the non-compliance with the parametric value to be trivial 	European Union (Drinking Water) Regulations 2014 (SI No. 106 of 2007) (as amended) European Communities (Water Policy) Regulations 2003 (SI No. 722 of 2003)	The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations
Urban Waste Water Treatment Directive (91/271/EEC)	 This Directive concerns the collection, treatment and discharge of urban waste water and the treatment and discharge of waste water from certain industrial sectors The objective of the Directive is to protect the environment from the adverse effects of waste water discharges 	Urban waste water entering collecting systems shall before discharge, be subject to secondary treatment Annex II requires the designation of areas sensitive to eutrophication which receive water discharges Establishes minimum requirements for urban waste water collection and treatment systems in specified agglomerations to include special requirements for sensitive areas and certain industrial sectors	European Communities (Urban Waste Water Treatment) Regulations 2001 (SI No. 254/2001)	The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations

Environmental Liability Directive (2004/35/EC)	•	Establish a framework of environmental liability based on the 'polluter-pays' principle, to prevent and remedy environmental damage	•	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	European Communities (Environmental Liability) Regulations, 2008	The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations
SEA Directive (2001/42/EC)	•	Contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development Provide for a high level of protection of the environment by carrying out an environmental assessment of plans and programmes which are likely to have significant effects on the environment		Carry out and environmental assessment for plans or programmes referred to in Articles 2 to 4 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	European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (SI No. 435/ 2004) (as amended) Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436/2004) (as amended)	The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations

EIA Directive (2011/92/EU as amended by 2014/52/EU)	•	Requires the assessment of the environmental effects of public and private projects which are likely to have significant effects on the environment Aims to assess and implement avoidance or mitigation measures to eliminate environmental effects, before consent is given of projects likely to have significant effects on the environment by virtue, inter alia, of their nature, size or location are made subject to a requirement for development consent and an assessment with regard to their effects. Those projects are defined in Article 4	•	All projects listed in Annex I are considered as having significant effects on the environment and require an EIA For projects listed in Annex II, a "screening procedure" is required to determine the effects of projects on the basis of thresholds/criteria or a case by case examination. This should take into account Annex III. 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 The information to be provided by the developer in accordance with paragraph 1 shall include at least: a description of the project comprising information on the site, design and size of the project; a description of the measures envisaged in order to avoid, reduce and, if possible, remedy significant adverse effects; the data required to identify and assess the main effects which the project is likely to have on the environment; an outline of the main alternatives studied by the developer and an indication of the main reasons for his choice, taking into account the environmental effects; a non-technical summary of the information referred to each of the above.	European Communities (Environmental Impact Assessment) Regulations 1989 (SI No. 349/1989) (as amended) European Union (Environmental Impact Assessment) (Flood Risk) Regulations 2012 (SI No. 470/2012)	The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations
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EU Maritime Spatial Planning Directive (2014/89/EU) National/Regional	This Directive establishes a framework for maritime spatial planning aimed at promoting the sustainable growth of maritime economies, the sustainable development of marine areas and the sustainable use of marine resources.	maritime spatial planning.In doing so, Member States shall take into account	S.I. No. 352/2016 - European Union (Framework for Maritime Spatial Planning) Regulations 2016	Implementation of the Plan as varied is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations.
Plan/Programme	Highest Level Aim/ Purpose/ Objective	Lower level relevant objectives , actions etc.	Relevant legislation	Relevance to the Plan as
Infrastructure and Capital Investment 2012-16: Medium Term Exchequer Framework	Reviews infrastructure and capital spending over a medium timeframe to ensure investment is made in the best areas Identifies gaps in existing infrastructure that require addressing to aid economic recovery, social cohesion and environmental sustainability	The approach identifies four main components of the investment strategy as follows: • Economic infrastructure – encompassing transport networks, energy provision and telecommunications capacity • Investment in the productive sector and human capital – such as direct supports for enterprise development; science, technology and innovation advancement; supports for tourism, agriculture, fisheries and forestry; and capital investment in education infrastructure • Environmental infrastructure – including our waste	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
		 and water systems and investment for environmental sustainability Critical social investment – such as the health service and social housing programmes 		

Smarter Travel – A Sustainable Transport Future – A New Transport Policy For Ireland 2009-2020 (2009)	•	Outlines a policy for how a sustainable travel and transport system can be achieved Sets out five key goals: o To reduce overall travel demand. o To maximise the efficiency of the transport network. o To reduce reliance on fossil fuels. o To reduce transport emissions. o To improve accessibility to transport.	•	Others lower level aims include: o 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 o 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 o improving the fuel efficiency of motorised transport through improved fleet structure, energy efficient driving and alternative technologies o strengthening institutional arrangements to deliver the targets	not applicable	In combination with this Policy the Plan as varied will contribute towards smarter travel and associated positive environmental effects.
Dublin to Galway Greenway Plan	٠	Develop a segregated cycling and walking trail to international standards, extending from Dublin City to Galway which is of a scale that will allow Ireland to harness the potential of an identified growing tourism market for cycling. This route will form part of an interconnected National Cycle Network of high quality, substantially traffic free, inter urban routes, which will establish Ireland as a quality international tourism destination for a broad range of associated recreational activities and pursuits.	•	To provide a segregated, substantially off road cycle route from Dublin City to Clifden via Galway City, maximising the use of - where feasible - existing and approved routes and disused railway line corridors and to also use existing plans and/or permitted projects where these have been subject to a consent process that has previously included the carrying out or screening for Strategic Environmental Assessment (SEA)/ Environmental Impact Assessment (EIA) and/or Appropriate Assessment (AA). The development of this route shall be subject to the requirements of Habitats and EIA Directives and shall comply with the provisions detailed in Appendix I 'Environmental Management and Sustainable Development' to this Plan1. Where State lands are not available, land will be acquired in order to secure the use of the infrastructure for future years, thereby securing the State's investment.	not applicable	In combination with this Plan, the Plan as varied will contribute towards smarter travel and associated positive environmental effects
Ireland's First National Cycle Policy Framework (2009)	•	Outlines objectives and actions aimed at developing a strong cycle network in Ireland Sets out 19 specific objectives, and details the 109 actions, aimed at ensuring that a cycling culture is developed	•	Sets a target where 10% of all journeys will be made by bike by 2020 Proposes the planning, infrastructure, communication, education and stakeholder participations measures required to implement the initiative	not applicable	In combination with this Framework the Plan as varied will contribute towards smarter travel and associated positive environmental effects
Scoping Study for a National Cycle Network (NCN)	•	Investigated the feasibility of developing a National Cycle Network for recreational routes in rural areas, urban areas and connecting larger urban areas The scoping study and subsequent workshops resulted in a recommended National Cycle Network	not	applicable	not applicable	In combination with this Study the Plan as varied will contribute towards smarter travel and associated positive environmental effects.

Strategic Framework for Integrated Land use and Transport (SFILT) – Department of Transport, Tourism and Sport	Presents the findings and conclusions of a steering group which was convened and tasked with overseeing the preparation of an integrated, evidence-based framework that would guide key land transport investment decisions.	 Key features of the framework policy include the following: Focus on economic growth Principles to frame future investment 	not applicable	In combination with this Study the Plan as varied will contribute towards smarter travel and associated positive environmental effects.
National Climate Change Strategy 2007 – 2012 (2007)	Outlines measures to be undertaken to meet the commitments under the Kyoto Protocol Identifies specific measures to meet the commitment up to 2012 and further measures to meet the 2020 target	not applicable	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
Climate Action and Low Carbon Development Act 2015	Ireland's national policy in response to climate change is determined, in part, by legislation.	In particular, Ireland's first-ever dedicated climate change law, the Climate Action and Low Carbon Development Act 2015, provides for the making of: • five-yearly National Mitigation Plans to specify the policy measures to reduce greenhouse gas emissions • a National Adaptation Framework to specify the national strategy for the application of adaptation measures in different sectors and by local authorities to reduce the vulnerability of the State to the negative effects of climate change. The Act also establishes the Climate Change Advisory Council to advise ministers and the government on climate change matters.	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
Delivering a Sustainable Energy Future for Ireland – The Energy Policy Framework 2007 – 2020 (2007)	White paper setting out a framework for delivering a sustainable energy future in Ireland Outlines strategic Goals for:	The underpinning Strategic Goals are: Ensuring that electricity supply consistently meets demand Ensuring the physical security and reliability of gas supplies to Ireland Enhancing the diversity of fuels used for power generation Delivering electricity and gas to homes and businesses over efficient, reliable and secure networks Creating a stable attractive environment for hydrocarbon exploration and production Being prepared for energy supply disruptions	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
The National Climate Change Adaptation Framework	The National Climate Change Adaptation Framework provides a strategic policy focus to ensure adaptation measures are taken across different sectors and levels of government to reduce Ireland's vulnerability to the negative impacts of climate change.	Actions include those relating to: Research and Knowledge Base Governance Local Plans Stakeholder Consultation	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management

National Renewable Energy Action Plan	•	A strategic approach for Ireland including measures to meet European targets for 2020 including Ireland's 16% target of gross final consumption to come from renewables by 2020	not applicable	Renewable Energy Directive 2009/28/EC	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
National Energy Efficiency Action Plan for Ireland 2007-2020 (2007)	•	This is the second National Energy Efficiency Action Plan for Ireland	The Plan reviews the original 90 actions outlined in the first Plan and updates/renews/removes them as appropriate	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
Sustainable Development – A Strategy for Ireland (1997)	•	Provides an analysis and a strategic framework for sustainable development in Ireland Identifies the approaches required to support sustainable development	not applicable	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
Wildlife Act of 1976 Wildlife (Amendment) Act, 2000	•	The act provides protection and conservation of wild flora and fauna	 Provides protection for certain species, their habitats and important ecosystems Give statutory protection to NHAs Enhances wildlife species and their habitats Includes more species for protection 	not applicable	The Council is obliged to comply with, as relevant and appropriate, the requirements of this legislation
Actions for Biodiversity 2011-2016 Ireland's National Biodiversity Plan, 2011 (Draft National Biodiversity Action Plan 2017 - 2021)	•	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	 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 ecosystems 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 	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
The Planning System and Flood Risk Management – Guidelines for Planning Authorities (2009)	•	Sets out comprehensive mechanisms for the incorporation of flood risk identification, assessment and management into the planning process Ensures flood risk is a key consideration in preparing development plans and local area	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	Planning and Development Act 2000 (as amended) SI No. 122/2010 EC (Assessment and	The Council is obliged to comply with, as relevant and appropriate, the requirements of these Guidelines

	 plans and in the assessment of planning applications Implementation of the Guidelines is through actions at national, regional, local authority and site-specific levels 	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 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.	Management of Flood Risks) Regulations 2010 SI No. 470/2012 European Union (Environmental Impact Assessment) (Flood Risk) Regulations 2012.	
European Communities (Water Policy) Regulations of 2003 (SI 722 of 2003) European Communities (Water Policy) Regulations of 2003 (SI 350 of 2014)	 Transposes the Water Framework Directive into legislation Outlines the general duty of public authorities in relation to water Identifies the competent authorities in charge of water policy (amended to Irish Water in 2013) and gives EPA and the CER the authority to regulate and supervise their actions 	 Implements River basin districts and characterisation of RBDs and River Basin Management Plans Requires the public to be informed and consulted on the Plan and for progress reports to be published on RBDs Implements a Register of protected areas, Classification systems and Monitoring programmes for water bodies Allows the competent authority to recover the cost of damage/destruction of status of water body Outlines environmental objectives and programme of measures and environmental quality standards for priority substances Outlines criteria for assessment of groundwater 	2000/60/EC c	The Council is obliged to comply with, as relevant and appropriate, the requirements of this legislation
European Communities Environmental Objectives (Surface waters) Regulations of 2009 (SI 272 of 2009)	 Transposes the requirements of the Water Framework Directive into Irish Legislation The Surface Waters Regulations also give further effect to the WFD, establishing a framework for Community action in the field of water policy and Directive 2006/11/EC on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community. 	 These Regulations provide, inter alia, for: The establishment of legally binding quality objectives for all surface waters and environmental quality standards for pollutants; The examination and where appropriate, review of existing discharge authorisations by Public Authorities to ensure that the emission limits laid down in authorisations support compliance with the new water quality objectives/standards; The classification of surface water bodies by the EPA for the purposes of the Water Framework Directive; The establishment of inventories of priority substances by the EPA; and The drawing up of pollution reduction plans by coordinating local authorities (in consultation with the EPA) to reduce pollution by priority substances and to cease and/or phase out discharges, emissions or losses of priority hazardous substances. 	2000/60/EC c	The Council is obliged to comply with, as relevant and appropriate, the requirements of this legislation
European Communities Environmental Objectives (Groundwater) Regulations of 2010 (SI 9 of 2010)	Transposes the requirements of the Groundwater Directive 2006/118/EC into Irish Legislation	Outlines environmental objectives to be achieved for groundwater bodies of groundwater against pollution and deterioration in quality Sets groundwater quality standards Outlines threshold values for the classification and protection of groundwater	2000/60/EC c Groundwater Directive a	The Council is obliged to comply with, as relevant and appropriate, the requirements of this legislation

			2010 (SI No. 9/2010) (as amended)	
Water Pollution Acts 1977 to 1990	The Water Pollution Acts allow Local Authorities the authority regulate and supervise actions relating to water in their division	 The Water Pollution Acts enable local authorities to: prosecute for water pollution offences; attach appropriate pollution control conditions in the licensing of effluent discharges from industry, etc., made to waters; issue notices ("section 12 notices") to farmers, etc., specifying measures to be taken within a prescribed period to prevent water pollution; issue notices requiring a person to cease the pollution of waters and requiring the mitigation or remedying of any effects of the pollution in the manner and within the period specified in such notices; seek court orders, including High Court injunctions, to prevent, terminate, mitigate or remedy pollution/its effects; prepare water quality management plans for any waters in or adjoining their functional areas 	Water Services Act 2013	The Council is obliged to comply with, as relevant and appropriate, the requirements of this legislation
European Communities (Urban Waste Water Treatment) Regulations 2001 (SI No. 254/2001)	Transposes the Urban Waste Water Treatment Directive into Irish Legislation Aims to protect receiving waters from environmental damage arising from Urban Waste water	 Sets out the legislative requirements for urban waste water collection and treatment systems Provides for monitoring programmes of discharges Specifies threshold values and minimum standards for water quality 	Urban Waste Water Treatment Directive (91/271/EEC)	The Council is obliged to comply with, as relevant and appropriate, the requirements of this legislation
Water Services Act 2007 Water Services (Amendment) Act 2012 Water Services Act 2013	 Provides the water services infrastructure Outlines the responsibilities involved in delivering and managing water services Identifies the authority in charge of provision of water and waste water supply Irish Water was given the responsibility of the provision of water and waste water services in the amendment act during 2013, therefore these services are no longer the responsibility of the 34 Local Authorities in Ireland 	 Key strategic objectives include: Ensuring Irish Water delivers infrastructural projects that meet key public health, environmental and economic objectives in the water services sector. Ensuring the provision of adequate water and sewerage services in the gateways and hubs listed in the National Spatial Strategy, and in other locations where services need to be enhanced. Ensuring good quality drinking water is available to all consumers of public and group water supplies, in compliance with national and EU drinking water standards Ensuring the provision of the remaining infrastructure needed to provide secondary waste water treatment, for compliance with the requirements of the EU Urban Waste water Treatment Directive. Promoting water conservation through Irish Water's Capital Investment Plan, the Rural Water Programme and other measures. Monitoring the on-going implementation of septic tanks inspection regime and the National Inspection Plan for Domestic Waste Water Treatment Systems. Ensuring a fair funding model to deliver water services. Overseeing the establishment of an economic 	not applicable	The Council is obliged to comply with, as relevant and appropriate, the requirements of this legislation

			regulation function under the CER.		
Irish Water's Water Services Strategic Plan 2015 and associated Proposed Capital Investment Plan 2014- 2016	•	This Water Services Strategic Plan sets out strategic objectives for the delivery of water services over the next 25 years up to 2040. It details current and future challenges which affect the provision of water services and identifies the priorities to be tackled in the short and medium term.	Six strategic objectives as follows: Meet Customer Expectations. Ensure a Safe and Reliable Water Supply. Provide Effective Management of Waste water. Protect and Enhance the Environment. Support Social and Economic Growth. Invest in Our Future.	The Water Services (No. 2) Act (2013)	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
National Water Resources Plan (in preparation)	•	The NWRP is a plan on how to provide a safe, secure and reliable water supply to our customers for the next 25 years, without causing adverse impact on the environment. The objective of the NWRP is to set out how we intend to maintain the supply and demand for drinking water over the short, medium and long term whilst minimising the impact on the environment.	The key objectives of our plan are to: Identify areas where there are current and future potential water supply shortfalls, taking into account normal and extreme weather conditions Assess the current and future water demand from homes, businesses, farms, and industry Consider the impacts of climate change on Ireland's water resources Develop a drought plan advising measures to be taken before and during drought events Develop a plan detailing how we deal with the material that is produced as a result of treating our drinking water Identify, develop and assess options to help meet potential shortfalls in water supplies Assess the water resources available at a national level including lakes, rivers and groundwater	not applicable	Implementation of the Plan as varied is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations.
National Spatial Strategy 2002-2020 (2002) to be replaced by the upcoming National Planning Framework	•	Planning framework for Ireland Aims to achieve a better balance of social, economic and physical development across Ireland, supported by effective planning	Proposes that areas of sufficient scale and critical mass will be built up through a network of gateways, hubs and key town	Local Government (Planning and Development) Act, 1963 (as amended) Requirement of the Planning and Development (Amendment) Act (2010)	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
Grid25 Implementation Programme	•	Framework for the development of the electricity transmission grid in the short, medium and long terms, to support a long-term sustainable and reliable electricity supply	Seeks to implement the provisions of the 2007 Government White Paper on Energy -"Delivering a Sustainable Energy Future for Ireland" in terms of development of electricity transmission infrastructure	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
National Landscape Strategy 2015	•	Aims to implement the European Landscape Convention in Ireland by providing for specific measures to promote the protection, management and planning of the landscape.	The objectives of the National Landscape Strategy are to:	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management

			Strengthen Public Participation.		
National Rural Development Programme 2014-2020	•	The National Rural Development Programme, prepared by the Department of Agriculture, Fisheries and Food, sets out a national programme based on the EU framework for rural development and prioritises improving the competitiveness of agriculture, improving the environment and improving the quality of life in rural areas	At a more detailed level, the programme also: Supports structural change at farm level including training young farmers and encouraging early retirement, support for restructuring, development and innovation; Aims to improve the environment, biodiversity and the amenity value of the countryside by support for land management through funds such as Natura 2000 payments etc.; and Aims to improve quality of life in rural areas and encouraging diversification of economic activity through the implementation of local development strategies such as non-agricultural activities	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
National Forestry Programme 2014-2020	•	Represents Ireland's proposals for 100% State aid funding for a new Forestry Programme for the period 2014 – 2020.	Measures include the following: Afforestation and Creation of Woodland NeighbourWood Scheme Forest Roads Reconstitution Scheme Woodland Improvement Scheme Native Woodland Conservation Scheme Knowledge Transfer and Information Actions Producer Groups Innovative Forest Technology Forest Genetic Reproductive Material Forest Management Plans	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
Forestry and Freshwater Pearl Mussel Requirements (Department of Agriculture, Fisheries and Food)	•	The Requirements describe a range of measures intended to reduce potential negative impacts on the species arising from forest operations and supplement all other Forest Service Guidelines and regulations.	The Requirements will apply to all potentially impacting forest operations within the catchments of FPM populations in rivers designated candidate Special Areas of Conservation (cSACs) for the species, as listed in Appendix 1. This list will be reviewed on an annual basis by the National Parks and Wildlife Service (NPWS) of the Department of the Environment, Heritage and Local Government in consultation with the Forest Service.	Habitats Directive (92/43/EEC) and the Wildlife Acts (1976, amended 2000)	Implementation of the Plan as varied is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations.
National Peatlands Strategy	•	This Draft Strategy, prepared by the National Parks and Wildlife Service, will, when finalised, establish principles in relation to Irish peatlands in order to guide Government policy. The Draft Strategy aims to provide a framework for which all of the peatlands within the State can be managed responsibly in order to optimise their social, environmental and economic contribution.	not applicable	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
National Hazardous Waste Management Plan (EPA) 2014-2020	•	Sets out the priorities to be pursued over the next number of years to continually improve the management of Ireland's hazardous waste.	The objectives of the revised Plan are: 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;	Section 26 of the Waste Management Act 1996 as amended	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection

Fáilte Ireland plans, strategies etc. including those relating to the Wild Atlantic Way, Ireland's Ancient East or other brands or initiatives	Fáilte Ireland's work includes preparing various plans and strategies for the Wild Atlantic Way, Ireland's Ancient East and other brands and initiatives. These plans are subject to their own environmental assessment processes and any project arising is required to be consistent with and conform with the provisions of all adopted/approved Statutory Policies, Strategies, Plans and Programmes, including provisions for the protection and management of the environment.	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 Some of Failte 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.	not applicable	Implementation of the Plan as varied is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations.
Regional and Inter-Co	ounty	those arising from various sociols such as tourion.		
Plan/Programme	Highest Level Aim/ Purpose/ Objective	Lower level relevant objectives , actions etc.	Relevant legislation in Ireland	Relevance to the Plan as varied
River Basin Management Plans and associated Programmes of Measures River Basin Management Plans - including the National River Basin Management Plan	Establish a framework for the protection of water bodies at River Basin District (RBD) level Preserve, prevent the deterioration of water status and where necessary improve and maintain <i>good status</i> of water bodies in that RBD Promote sustainable water usage	Aims to protect and enhance all water bodies in the RBD and meet the environmental objectives outlined in Article 4 of the Water Framework Directive Identifies and manages water bodies in the RBD Establishes a programme of measures for monitoring and improving water quality in the RBD Involves the public through consultations	Water Framework Directive (2000/60/EC) European Communities (Water Policy) Regulations, 2003 (SI No. 722) (as amended) Guidelines for the Establishment of River Basin District Advisory Councils (RBDAC)	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
Regional Planning Guidelines for the West Regional Planning Guidelines will be replaced by Regional Economic and Spatial Strategies after 2017	 Provide a long-term strategic planning framework for the development of regions The RPGs for the West Region 2010-2022 provide a framework for the long term strategic development of the West Region through setting out goals, policies and objectives in relation to population targets, housing, infrastructure, economic development, environment, amenities, social infrastructure and community development, ensuring the successful implementation of the NSS at regional, county and local level. 	 Aim to give regional effect to the National Spatial Strategy Guide the Development Plans and lower tier plans of planning authorities 	Requirement of the Planning and Sustainable Development Act (2000), as amended	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
Freshwater Pearl Mussel Sub-Basin Management Plans	 Identifies the current status of the species and the reason for loss or decline Identifies measure required to improve or restore current status 	 Identifies pressures on Freshwater Pearl Mussels for each of the designated populations in Ireland Outlines restoration measures required to ensure favourable conservation status 	Water Framework Directive (2000/60/EC) and Habitats Directive (92/43/EEC) European Communities	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives

			(Water Policy) Regulations	of the regulatory framework
			2003 (SI No. 722 of 2003)	for environmental protection
			European Communities	and management
			(Birds and Natural Habitats)	
			Regulations 2011 (SI No.	
			477/2011) The Wildlife Act	
			1976 and the Wildlife	
			(Amendment) Act 2000	
Management Plans for	Article 6(1) of the Habitats Directive requires that	 Integrated Management Plans can be practical, 	Habitats Directive	To cumulatively contribute
European Sites	Member States establish the necessary conservation	achievable and sustainable and have regard to		towards – in combination with
	measures for Special Area of Conservation involving, if	all relevant ecological, cultural, social and		other users and bodies – the
	need be, appropriate management plans specifically	economic considerations and with special regard		achievement of the objectives
	designed for the sites or integrated into other	to local communities.		of the regulatory framework
	development plans.			for environmental protection
Outputs from the	The national Catchment Flood Risk Assessment and	CFRAM Studies are being undertaken for all River Basin	not applicable	and management To cumulatively contribute
Western Catchment	Management (CFRAM) programme commenced in	Districts.	пот аррисавіе	towards – in combination with
Flood Risk Assessment	Ireland in 2011 and is being overseen by the Office of	Districts.		other users and bodies – the
and Management	Public Works. The CFRAM Programme is intended to	The studies are focusing on areas known to have		achievement of the objectives
Programme	deliver on core components of the National Flood Policy,	experienced flooding in the past and areas that may be		of the regulatory framework
1	adopted in 2004, and on the requirements of the EU	subject to flooding in the future either due to development		for environmental protection
	Floods Directive. The Programme is being implemented	pressures or climate change. Flood Maps have been		and management
	through CFRAM Studies which are being undertaken for	published and Flood Risk Management Plans are currently		
	each of the six river basin districts in Ireland.	being finalised having previously been subject to public		
		consultations.		
Connacht-Ulster	The regional plan provides the framework for waste	Strategic objectives:	European Directive	To cumulatively contribute
Regional Waste	management for a period of six years and sets out a	 Policy & Legislation 	(2008/98/EC) on Waste	towards – in combination with
Management Plan	range of policies and actions in order to meet specified	Prevention	(Waste Framework	other users and bodies – the
	mandatory and performance targets. The strategic vision	Resource Efficiency	Directive);	achievement of the objectives
	of the regional waste plan is to rethink our approach to	Coordination	Council Decision	of the regulatory framework
	managing waste, by viewing our waste streams as	Infrastructure Planning	(200/532/EC) establishing a	for environmental protection
	valuable material resources, leading to a healthier	Enforcement & Regulations Productions Output Description Output Description Descripti	list of wastes; and	and management
	environment and sustainable commercial opportunities	Protection Other Wester	Regulation (1013/2006) on the shipments of waste	
County and Local	for our economy.	Other Wastes	the shipments of waste	
Plan/Programme	Highest Level Aim/ Purpose/ Objective	Lower level relevant objectives , actions etc.	Relevant legislation in	Relevance to the Plan as
		•	Ireland	varied
County Development	 Outlines planning objectives for County/Town 	 Identifies future infrastructure, development and 	Requirement of the Planning	To cumulatively contribute
Plans including the	development over six year lifespan	zoning required	and Development Act	towards - in combination with
Galway County	Strategic framework for planning and	 Protects and enhances amenities and 	(2000), as amended	other users and bodies – the
Development Plan	sustainable development including those set	environment		achievement of the objectives
2015-2021 (as varied)	out in National Spatial Strategy and Regional	 Guides planning authority in assessing proposals 		of the regulatory framework
	Planning Guidelines			for environmental protection
Proposed Variation No.	Proposed Variation 2 (a) is to integrate a plan	The Bearna Plan further contributes towards the	Planning and Development	and management
2 (a) to the Galway	 Proposed Variation 2 (a) is to integrate a plan (including land use zoning) for sustainable 	 The Bearna Plan further contributes towards the existing framework for the planned, co- 	Act (2000), as amended	To cumulatively contribute towards – in combination with
County Development	development of Bearna into the County	ordinated and sustainable development of the	Act (2000), as afficiated	other users and bodies – the
Plan 2015-2021	Development Plan.	Bearna area, and for enhancement and		achievement of the objectives
1 10.11 2010 2021	Bevelopment Flam.	facilitation of the balancing of economic, social		of the regulatory framework
		and environmental infrastructure in order to		for environmental protection

		maintain and develop a high quality of life, without compromising the protection of the environment and the needs of future generations		and management.
Local Area Plans (including those for Athenry, Clifden, Craughwell, Gort, Loughrea, Maigh Cuilinn, Oranmore, Oughterard, Portumna and Tuam)	Statutory documents which provide detailed planning policies to ensure proper planning and sustainable development of area Set out objectives for future planning and development	Identifies issues of relevance to the area and outlines principles for future development of area Is consistent with relevant County/Town Development Plans, National Spatial Strategy and Regional Planning Guidelines	Local Government (Planning and Development) Act, 1963 (as amended) Requirement of the Planning and Development (Amendment) Act (2010)	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
Local Economic and Community Plan for County Galway	The LECP 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 local authority area, both by itself directly and in partnership with other economic and community development stakeholders.	The LECP and County Development Plan are closely linked. The LECP must be consistent with the Core Strategy of the County Plan.	Local Government Reform Act 2014	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
Groundwater Protection Scheme for County Galway	Aims to preserve the quality of groundwater for drinking purposes and other beneficial uses, and for the benefit of present and future generations.	The objectives, which are interrelated, are as follows: to assist the statutory authorities in meeting their responsibilities for the protection and conservation of groundwater resources; to provide geological and hydrogeological information for the planning process, so that potentially polluting developments can be located and controlled in an environmentally acceptable way; to integrate the factors associated with groundwater contamination risk, to focus attention on the higher risk areas and activities, and to provide a logical structure within which contamination control measures can be selected	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
Galway County Heritage & Biodiversity Plan 2017-2022	The aim of the Galway County Heritage & Biodiversity Plan 2017- 2022 is to place heritage and biodiversity at the heart of public life in the county 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.	Three overarching objectives have been identified for the Heritage & Biodiversity Plan as follows: 1. To increase awareness, appreciation and participation 2. To gather and share knowledge 3. To manage and conserve our heritage including biodiversity.	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management