

SEA STATEMENT

FOR THE

CLIFDEN LOCAL AREA PLAN 2018-2024

for: Galway County Council

Áras an Chontae
Prospect Hill
Galway



by: CAAS Ltd.

1st Floor
24-26 Ormond Quay Upper
Dublin 7



DECEMBER 2018

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Section 1 Introduction

1.1 Introduction and Legislative Context

This is the Strategic Environmental Assessment (SEA) Statement for Clifden Local Area Plan 2018-2024.

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

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 and the Planning and Development (Strategic Environmental Assessment) Regulations 2004. The Regulations have been amended by the European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011 and the Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011.

1.2 Content of the SEA Statement

Where SEA is undertaken, the Regulations require that a Statement is made available to the public and the competent environmental authorities after the making of the Plan.

This Statement is referred to as an SEA Statement.

The SEA Statement is required to include information summarising:

- a) how environmental considerations have been integrated into the Plan;
- b) how the following have been taken into account during the preparation of the Plan:
 - the environmental report,
 - submissions and observations made to the planning authority on the Draft Plan and Environmental Report, and
 - any transboundary consultations (these are not relevant to this SEA).
- c) the reasons for choosing the Plan in the light of the other reasonable alternatives dealt with; and
- d) the measures decided upon to monitor the significant environmental effects of implementing the Plan.

1.3 Implications of SEA for the Plan

SEA has been undertaken on the Plan and the findings of the SEA are expressed in an Environmental Report, the first published version of which accompanied the Draft Plan on public display. The Environmental Report was updated in order to take account of:

- Recommendations contained in submissions; and
- Changes to the Draft Plan that were made on foot of submissions.

Galway County Council have been provided with the findings of SEA output during their consideration of the Plan and before the Plan was adopted.

Section 2 How Environmental Considerations were integrated into the Plan

2.1 Introduction

Environmental considerations were presented to the Council for its consideration through:

1. Consultations;
2. Communication of environmental sensitivities throughout the SEA process;
3. Appropriate Assessment;
4. Strategic Flood Risk Assessment;
5. Consideration of alternatives;
6. Integration of environmental considerations; and
7. Integration of individual SEA and AA provisions into the Plan.

2.2 Consultations

As environmental authorities identified under the Planning and Development (SEA) Regulations, as amended, the following authorities were sent SEA scoping notices indicating that submissions or observations in relation to the scope and level of detail of the information to be included in the environmental report could be made to the Galway County Council: Environmental Protection Agency, Department of Communications, Climate Action and Environment, Department of Agriculture, Food and the Marine, Department of Culture, Heritage and the Gaeltacht and all adjoining planning authorities¹.

Detail on submissions made on foot of the SEA scoping notice is provided under Section 3.2.

Detail is also provided on submissions that were made on the Draft Plan and the SEA Environmental Report while they were on public display (see Section 3.3).

2.3 Communication of environmental sensitivities throughout the SEA process

Environmental considerations were integrated into the Plan before it was placed on public display. Individual sensitivities that were considered by the Planning Team preparing the Plan included the following:

- European Sites (Special Areas of Conservation and Special Protection Areas);
- Natural Heritage Areas and proposed Natural Heritage Areas;
- Status of Surface and Ground Waters;
- Various entries to the Water Framework Directive's Register of Protected Areas;
- Groundwater Vulnerability;
- Water Services Capacity, Performance and Demand;
- Landscape sensitivity and Protected Views; and
- Cultural heritage (archaeological and architectural) sensitivities.

A number of these sensitivities are mapped on Figures 2.1 to 2.4.

2.4 Appropriate Assessment

Stage 2 Appropriate Assessment (AA) has been undertaken on the Plan. AA is an impact assessment process concerning European Sites (which collectively comprise the Natura 2000 network) - these sites have been designated or proposed for designation by virtue of their ecological importance.

¹ Galway City Council, Mayo County Council, Roscommon County Council, Offaly County Council, Tipperary County Council and Clare County Council.

The Habitats Directive² requires, inter alia, that plans and programmes undergo an AA process to establish the likely or potential effects arising from implementation on the Plan. If the effects are deemed to be significant, potentially significant or uncertain then the Plan must undergo Stage 2 AA.

The Stage 2 AA for the Plan concluded that the Plan would not affect the integrity of any European Site.

2.5 Strategic Flood Risk Assessment

A Strategic Flood Risk Assessment (SFRA) has been undertaken alongside the SEA process identifying and assessing flood risk in zoned areas.

The requirement for SFRA is provided under 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (Department of the Environment, Heritage and Local Government and Office of Public Works, 2009).

The SFRA facilitated the integration of various provisions into the Plan and concluded that the Plan complies with the Flood Risk Management Guidelines.

2.6 Consideration of Alternatives

Consideration of the environmental effects arising from a variety of different alternatives for the Plan (see Section 4) has contributed towards the protection and management of the environment in the overall strategy for the Plan.

2.7 Integration of individual SEA and AA provisions into the Plan

Table 2.1 links key mitigation measure(s) - which have been integrated into the Plan - 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 that accompany the relevant measures in the Plan.

² Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora

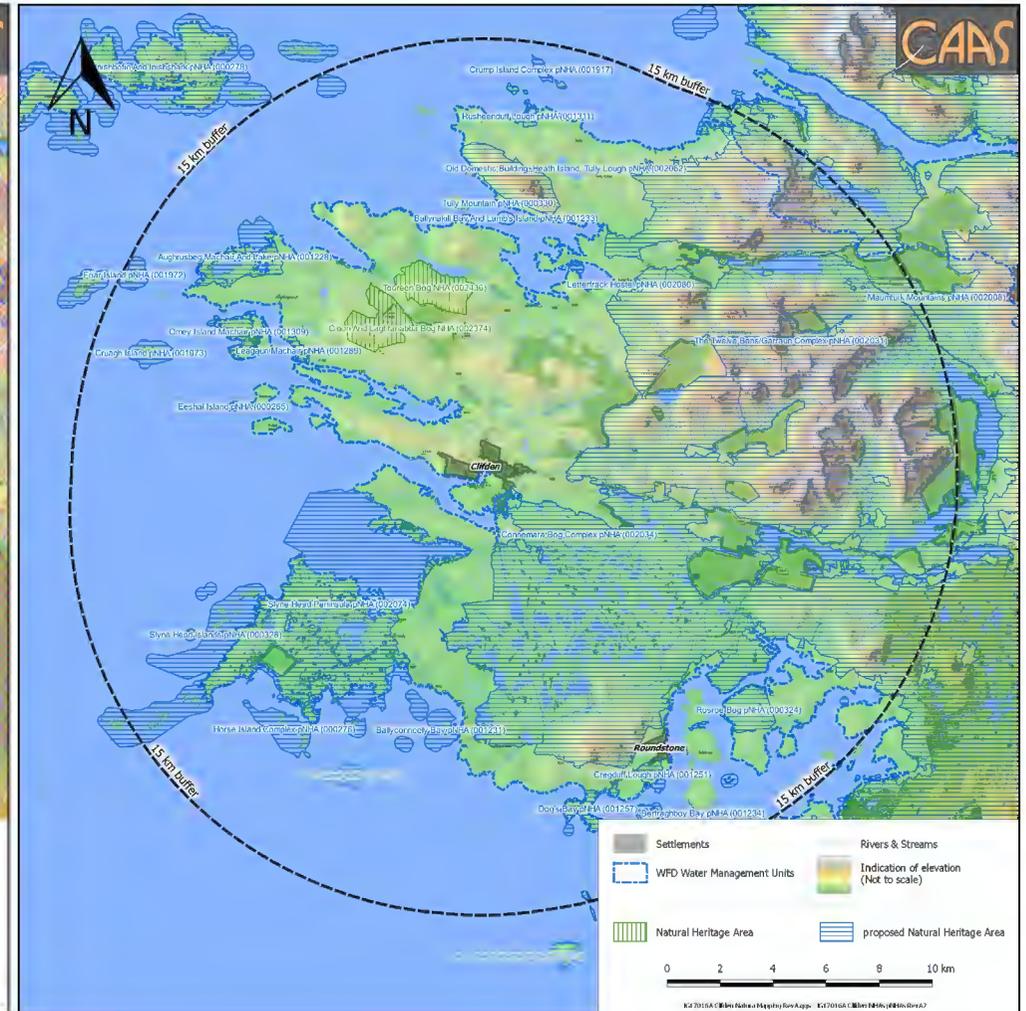
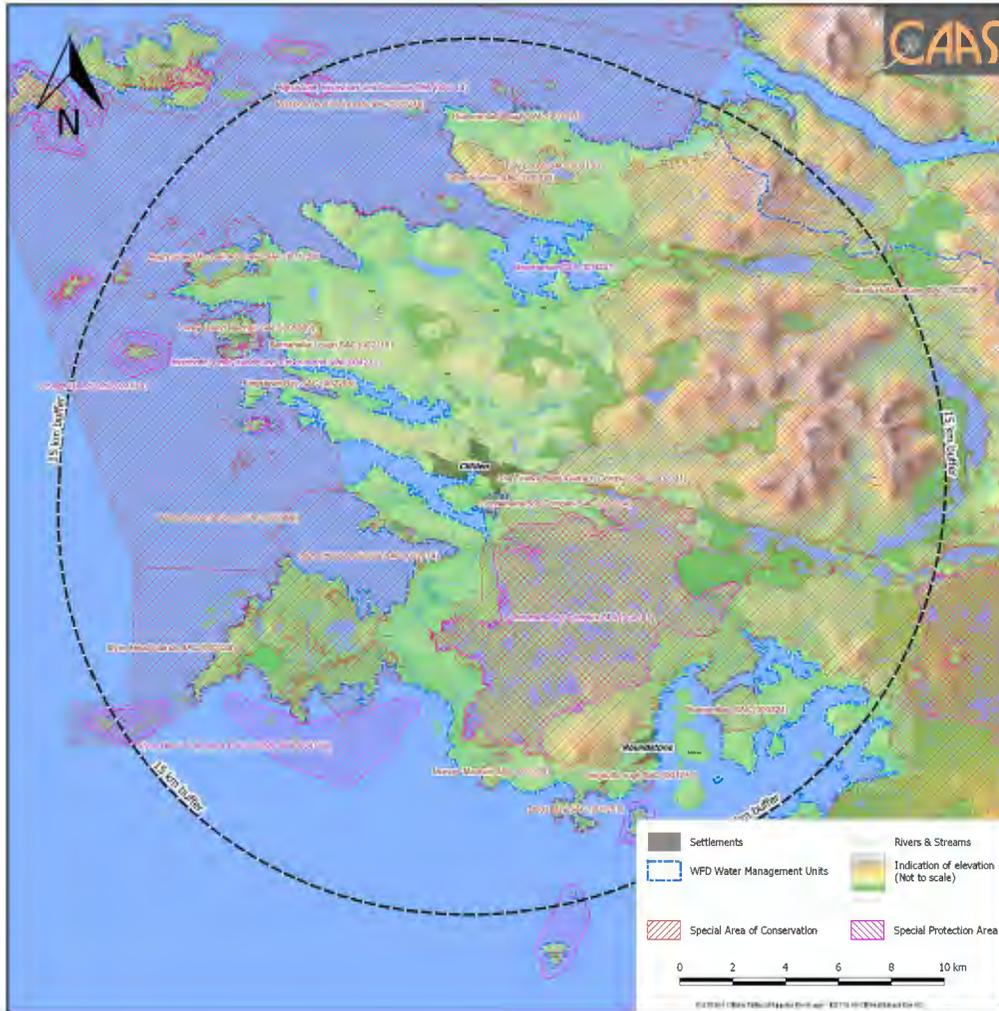
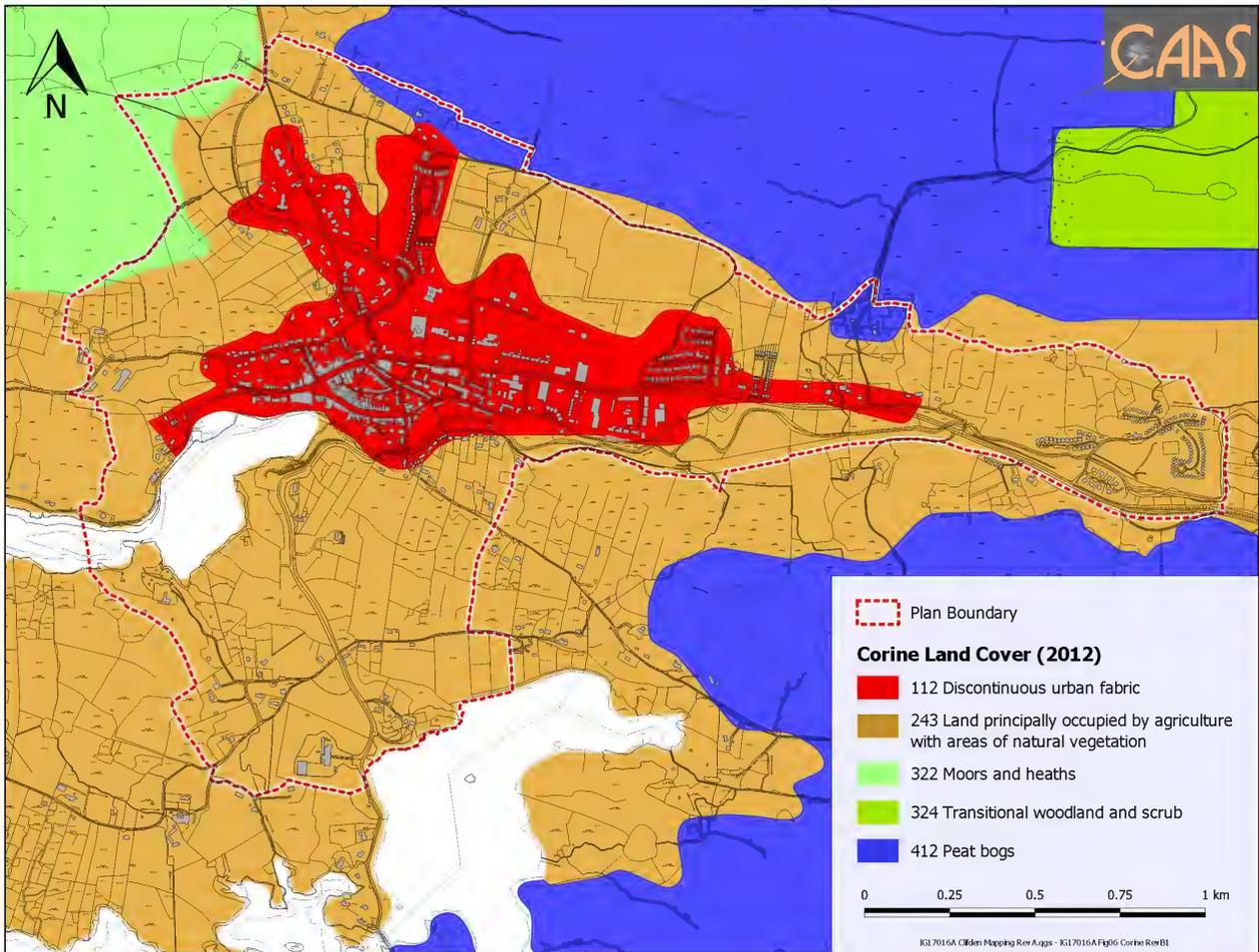
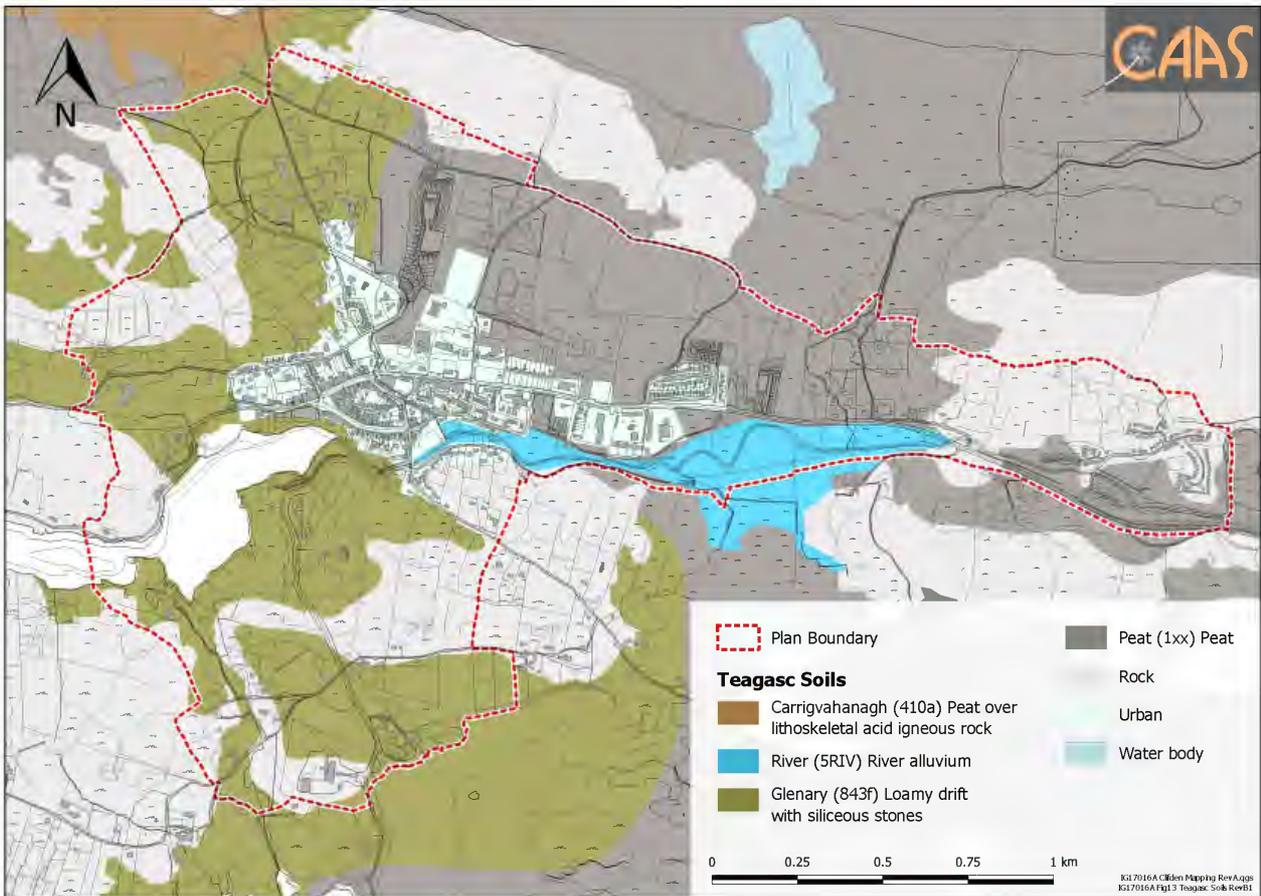


Figure 2.1 Selection of Individual Environmental Sensitivities taken into account (1 of 4)

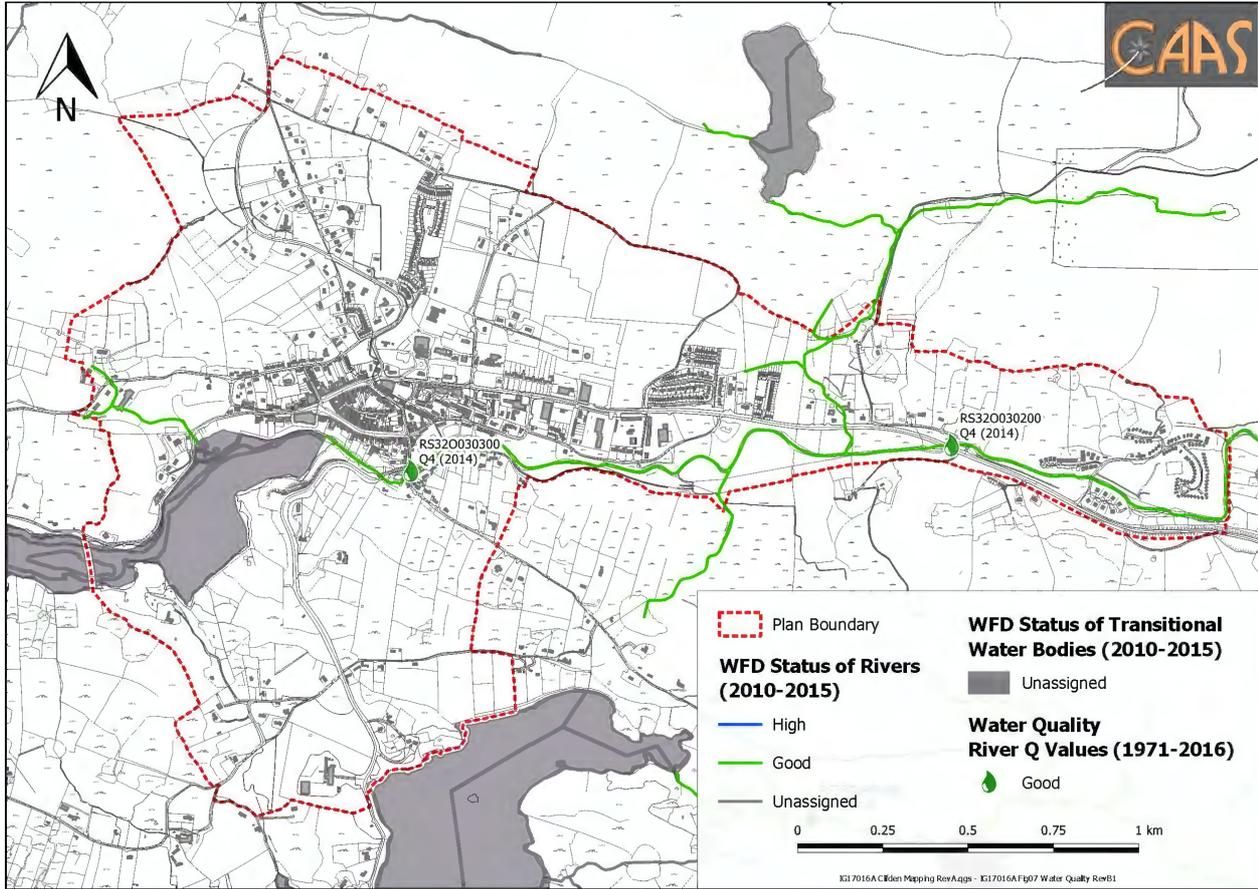


CORINE Land Cover Mapping 2012

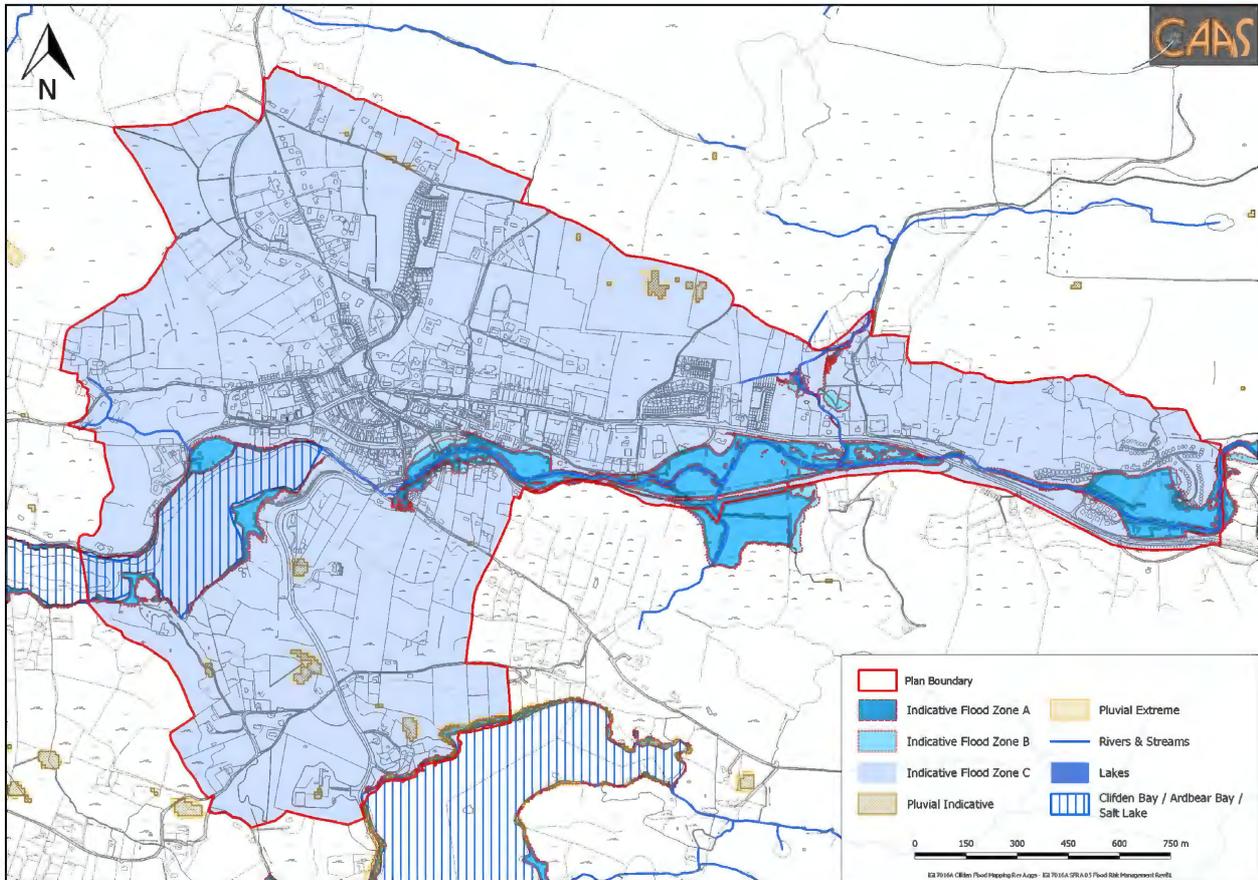


Soils

Figure 2.2 Selection of Individual Environmental Sensitivities taken into account (2 of 4)

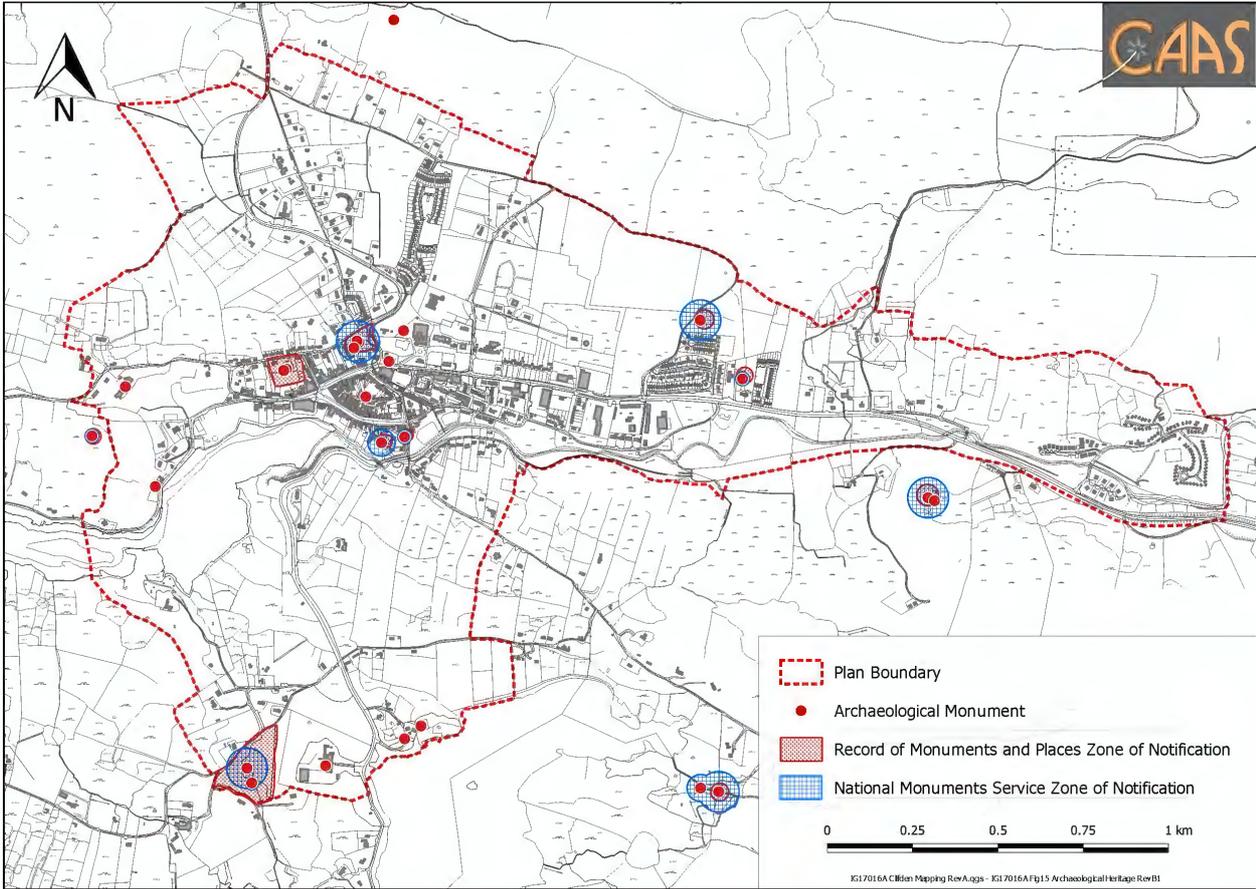


WFD Status of Surface Waters

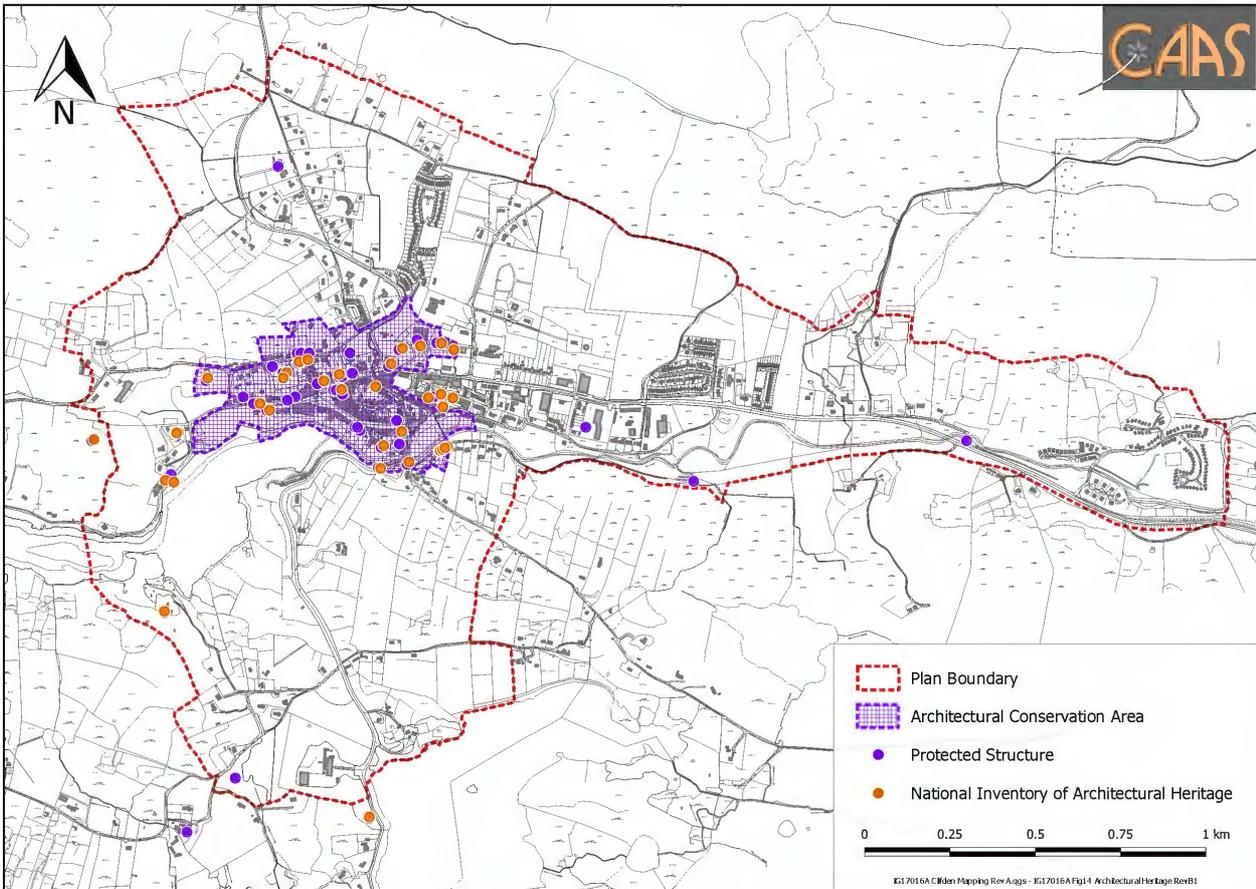


Flood Risk

Figure 2.3 Selection of Individual Environmental Sensitivities taken into account (3 of 4)



Archaeological Heritage



Architectural Heritage

Figure 2.4 Selection of Individual Environmental Sensitivities taken into account (4 of 4)

Table 2.1 Integration of Environmental Considerations

Environmental Component	Likely Significant Effect, if unmitigated	Mitigation Measures, including:
All	All	<p>Measures from the Local Area Plan</p> <ul style="list-style-type: none"> Objective LU 10 - Galway County Development Plan 2015-2021 (as varied)³ Objective NH 13 - Construction Environmental Management Plan Objective TI 4 – Road Schemes/Road Improvements
Biodiversity, Flora and Fauna	<p>Arising from both construction and operation of development and associated infrastructure:</p> <ul style="list-style-type: none"> Loss of/damage to biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species, listed species, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna; Habitat loss, fragmentation and deterioration, including patch size and edge effects; and Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species. 	<p>Measures from the Local Area Plan</p> <ul style="list-style-type: none"> Objective DS 3 – European Sites Network and Appropriate Assessment Objective ED 9 – Tourism Development Objective UD 4 – Green Network and Landscaping Policy NH 1 – Natural Heritage, Landscape and Environment Objective NH 1 – European Sites Objective NH 2 – Protected Habitats and Species Objective NH 3 – Natural Heritage Areas and Proposed Natural Heritage Areas Objective NH 4 – Impact Assessments Objective NH 5 – Biodiversity & Ecological Networks Objective NH 6 – Water Resources Objective NH 7 – Wetlands, Springs, Rivers and Streams Objective NH 8 – Riparian Zones Objective NH 9 – Trees and Hedgerows Objective NH 10 – Geological and Geo-morphological Systems Objective NH 11 – Control of Invasive and Alien Species Objective NH 12 – Consultation with Environmental Authorities DM Guideline NH 1 – Control of Invasive Species & Bio-Security Measures Objective NH 13 - Construction Environmental Management Plan <p>Measures from the Galway County Development Plan as varied</p> <ul style="list-style-type: none"> Policies NHB 1, NHB 2, NHB 3, NHB 5, NHB 6 and NHB 7 Objectives DS 6, DS 9, EQ1, EQ 4, ICT 1, NHB 1, NHB 2, NHB 4, NHB 5, NHB 6, NHB 7, NHB 11, NHB 13, AFF 6 and DS10 <p>Also see various measures providing for populations in rural and supporting areas.</p>
Population and Human Health	Potential interactions if effects upon environmental vectors such as water and air are not mitigated	<p>Measures from the Local Area Plan</p> <ul style="list-style-type: none"> Objective TI 7 – Noise Objective ENV 5 – Radon <p>Measures from the Galway County Development Plan as varied</p> <ul style="list-style-type: none"> Policy CC 8 Objectives TI 12 and EQ 2 <p>Also see measures related to soil, water quality, flooding, waste water treatment and drinking water supply and quality.</p>
Soil	Damage to the hydrogeological and ecological function of the soil resource	<p>Measures from the Galway County Development Plan as varied</p> <ul style="list-style-type: none"> Objective NHB12 Soil/Ground Water Protection Objective NH 10 – Geological and Geo-morphological Systems <p>Also see measures related to water quality and waste water treatment.</p>
Water	<p>Adverse impacts upon the status of water bodies arising from changes in quality, flow and/or morphology</p> <p>Increase in the risk of flooding</p>	<p>Measures from the Local Area Plan</p> <ul style="list-style-type: none"> Objective NH 6 – Water Resources Objective NH 7 – Wetlands, Springs, Rivers and Streams Objective NH 8 – Riparian Zones Objective DS 7 – Flood Risk Management and Assessment Objective DS 8 – Climate Change & Adaptation Objective LU 9 – Constrained Land Use Zone (CL) Objective LU 9 – Flood Risk Areas and Land Use Zones (Refer to Map 1, 2 and Map 5) Policy FL 1 – Flood Risk Management Objective FL 1 – Flood Risk Management and Assessment Objective FL 2 – Flood Zones and Appropriate Land Uses Objective FL 3 – Structural and Non-Structural Risk

³ Objective LU 10 - Galway County Development Plan 2015-2021 (as varied):

The provisions of the Galway County Development Plan 2015 2021 (as varied), including the measures contributing towards environmental protection and sustainability (some of these measures are repeated in Section 9 of the SEA) Environmental Report that accompanies this Plan) shall be complied with by any future development.

Environmental Component	Likely Significant Effect, if unmitigated	Mitigation Measures, including:
		<p>Management Measures in Flood Vulnerable Zones</p> <ul style="list-style-type: none"> • Objective FL 4 – Strategic Flood Risk Assessment and Flood Risk Assessment • Objective FL 5 – Environmental Impact Assessment (EIA) & Flood Risk Assessment • Objective FL 6 – Pluvial and Groundwater Flood Risk • Objective FL 7 – New and Emerging Data • Objective FL 8 – Protection of Water Bodies and Watercourses • Objective FL 9 – Arterial Drainage Scheme • Objective FL 10 – Improvement &/Or Restoration of Natural Flood Risk Management Functions • DM Guideline FL 1 – Flood Zones and Appropriate Land Uses • DM Guideline FL 2 – Structural and Non-Structural Risk Management Measures in Flood Vulnerable Zones • DM Guideline WQ 1 – Water Bodies and Watercourses <p>Measures from the Galway County Development Plan as varied</p> <ul style="list-style-type: none"> • Policies NHB 4, FL 1, FL 2, FL 3, FL 4 and FL 5 • Objectives NHB 3, NHB12, NHB 14, EQ1, AFF 5, AFF 6, AFF9, CS 4, WS 1, WS 2, WS 7, WS 9, WS 11, WW 1, WW 7, FL 1, FL 2, FL 3, FL 4, FL 5, FL 6, DS 7, DS 8, DS 9 and RA 1 • DM Standard 27: Surface Water Drainage & Flooding
Material Assets	<p>Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts)</p> <p>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)</p> <p>Increases in waste levels</p>	<p>Measures from the Local Area Plan</p> <ul style="list-style-type: none"> • Policy UI 1 – Water Supply, Wastewater and Combined Drainage Infrastructure • Policy UI 2 – Irish Water’s Water Services Strategic Plan • Objective UI 1 – Irish Water & Water and Wastewater Projects • Objective UI 2 – Water Supply & Water Conservation • Objective UI 3 – Wastewater Disposal • Objective UI 4 – Connections to the Public Sewer & Public Water Mains • Objective UI 5 – Surface Water Drainage and Sustainable Drainage Systems • Objective UI 6 – Wastewater Treatment Plant Buffer • Policy WM 1 – Waste Management • Policy WM 2 – Waste Management Plan • Objective WM 1 – Waste Prevention, Reduction & Recycling • Objective WM 2 – Bring Bank Facility <p>Measures from the Galway County Development Plan as varied</p> <ul style="list-style-type: none"> • 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
Air and Climatic Factors	<p>Emissions to air including greenhouse gas emissions and other emissions.</p> <p>Climate adaptation interactions</p>	<p>Measures from the Local Area Plan</p> <ul style="list-style-type: none"> • Objective DS 8 – Climate Change & Adaptation • Objective CF 9 – Amenity Network • Policy ST 1 – Sustainable Transport, Walking and Cycling • Objective ST 1 – Integrated Land Use and Transport • Objective ST 2 – Sustainable Transportation • Objective ST 3 – Walking • Objective ST 4 – Cycling • Objective ST 5 – Bicycle Parking • Objective ST 6 – Walking & Cycling Strategy • Objective ST 7 – Pedestrian Crossings • Objective ST 8 – Amenity Walking/Cycling Network • Objective ST 9 – Mobility Management Plans • Objective ST 10 – Charging Points for Electric Vehicles • Objective ST 11 – Bus Facilities & Services • Objective TI 7 – Noise • Objective TI 10 – Preparation of a Revised Traffic Management Plan • Objective TI 14 – New Developments & Connection to the Town Footpath & Lighting Network • Objective TI 15 – Footpath, Public Lighting, Cycle Provision & Traffic Calming • Policy ENV 1 – Climate Change Policy • Objective ENV 1 – Climate Change & The National Climate Change Adaptation Framework • Objective ENV 2 – Climate Change & Green Infrastructure

Environmental Component	Likely Significant Effect, if unmitigated	Mitigation Measures, including:
		<ul style="list-style-type: none"> • Objective ENV 3 – Air Quality • Objective ENV 4 – Air Purification • DM Guideline EC 1 – Energy Statements • Objective UD 4 – Green Network and Landscaping <p>Measures from the Galway County Development Plan as varied</p> <ul style="list-style-type: none"> • 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
Cultural Heritage	<p>Effects on entries to the Record of Monuments and Places and other archaeological heritage</p> <p>Effects on entries to the Records of Protected Structures, Architectural Conservation Areas and other architectural heritage</p>	<p>Measures from the Local Area Plan</p> <ul style="list-style-type: none"> • Objective ED 9 – Tourism Development • Objective ED 6 – Visual Quality Working Environments • DM Guideline ED2 – Design and Access Statements • Objective UD 6 – Design and Access Statements • DM Guideline UD1 – Design and Access Statements • Policy HC 1 – Built Heritage • Policy HC 2 – Cultural Heritage • Objective HC 1 – Architectural Heritage and Protected Structures • Objective HC 2 – Protected Structures • Objective HC 3 – Architectural Conservation Areas • Objective HC 4 – Development Relating to Protected Structures and ACAs • Objective HC 6 – Demolition • Objective HC 7 – Architectural Conservation Area Appraisal and Management Plan • Objective HC 8 – Vernacular Architecture & Structures of Local Interest • Objective HC 9 – Archaeological Heritage • Objective HC 10 – Other Archaeological Sites/Landscapes • Objective HC 11 – Protection of Monuments and Places • Objective HC 12 – Archaeological Assessment • Objective HC 13 – Underwater Archaeological Sites <p>Measures from the Galway County Development Plan as varied</p> <ul style="list-style-type: none"> • 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
Landscape	Occurrence of adverse visual impacts	<p>Measures from the Local Area Plan</p> <ul style="list-style-type: none"> • Objective ED 6 – Visual Quality Working Environments • DM Guideline ED2 – Design and Access Statements • Policy UD1 – Urban Design and Landscape • Objective UD 1 – High Quality, Contextually Sensitive Design • Objective UD 4 – Green Network and Landscaping • Objective UD 6 – Design and Access Statements • Objective UD 7 – Landscape Character, Values, Sensitivity and Views/Prospects • DM Guideline UD1 Design and Access Statements • Policy NH 1 – Natural Heritage, Landscape and Environment <p>Measures from the Galway County Development Plan as varied</p> <ul style="list-style-type: none"> • Policy LCM 1 • Objectives LCM 1, LCM 2, LCM 3, FPV 1 and WH 1

Section 3 Environmental Report and Submissions/ Observations

3.1 Introduction

This section details how both the Environmental Report and submissions and observations made to Galway County Council on the Environmental Report and SEA process have been taken into account during the preparation of the Plan and the SEA.

3.2 SEA Scoping Notices and Submissions

As part of the scoping process for preparation of the Plan, environmental authorities⁴ 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 the Department of Culture, Heritage and the Gaeltacht. These submissions influenced the scope of the assessments and were taken into account during the undertaking of the SEA, Strategic Flood Risk Assessment (SFRA) and Appropriate Assessment (AA).

The submission from the EPA provided specific comments and advice covering the following issues:

- Critical Service Infrastructure
- Water Related Considerations
- Catchment Management
- Flood Risk
- Biodiversity
- Landscape
- Historic Landfill Sites.
- Climate Adaptation / Climate Mitigation
- Mitigation Measures
- Additional Plans/Programmes to consider
- Environmental Authorities

⁴ The following authorities were notified: Environmental Protection Agency, Department of Communications, Climate Action and Environment, Department of Agriculture, Food and the Marine, Department of Culture, Heritage and the Gaeltacht and all adjoining planning authorities.

The submissions from the Department of Culture, Heritage and Gaeltacht provided specific comments and advice covering the following issues:

- Archaeology
- Nature Conservation
- Duties in relation to nature conservation
- Matters relating to the Plan
- SEA - biodiversity, flora and fauna
- Available guidance
- Available ecological information
- Appropriate Assessment

3.3 Submissions on the Environmental Reports for the Draft Plan and Proposed Material Alterations⁵

Various submissions were made on the Draft Plan, Proposed Material Alterations and associated environmental assessment documents while these documents were on public display. Certain submissions resulted in updates being made to the Plan, SEA and AA documents.

On foot of a submission from the Department of Culture, Heritage and the Gaeltacht made during public display of the Draft Plan, updates including the following were made:

- To add reference to the SEA Scoping submission from the Department of Culture, Heritage and the Gaeltacht and its content in the SEA Environmental Report;

⁵ Note that a recommendation regarding MA18 (changing of zoning from *Residential Phase 2* to *Residential Phase 1*) was raised in a submission during the Plan preparation process. SEA was not required for this alteration as environmental effects arising from changes to the likelihood in the timing of development at this site, which is adjacent to other Residential lands, would be mitigated by the various environmental protection and management measures that have already been integrated into the Plan to the extent that any residual effects arising would not be significant.

- To review terminology used in the Plan regarding Appropriate Assessment and Appropriate Assessment Natura Impact Report;
- To add text to Objective NH 12 "Consultation with Environmental Authorities" concerning Appropriate Assessment responsibilities and consultation with the Department of Culture, Heritage and the Gaeltacht; and
- To update AA documentation, including to improve clarity in the screening conclusion and to provide extra detail on Qualifying Interests and conservation objectives.

A submission from the Department of Culture, Heritage and the Gaeltacht made during public display of the Proposed Material Alterations, made a number of statements regarding SEA documentation that were responded to in detail in the Chief Executive's Report on Submissions⁶. This submission did not warrant the making of updates to the SEA documentation. Updates to the AA documentation took account of both this submission and the earlier submission made by the Department.

3.4 SEA documents including SEA Environmental Report

The Draft Plan and accompanying documents (including SEA Environmental Report and AA

and SFRA documents) were placed on public display from 6 July to 17 August 2018, having integrated various recommendations arising from the SEA, AA and SFRA processes. Responses to submissions made on the SEA Environmental Report and AA and SFRA documents during the period of public display of a Draft Plan were integrated into a Chief Executive's Report and considered by Galway County Council.

7 Material Alterations were proposed after public display of the Plan. Taking into account the measures that had already been integrated into the Draft LAP and associated County Development Plan that contribute towards environmental protection, environmental management and sustainable development, it was determined that all potential effects arising from all Proposed Material Alterations will be mitigated so as not to be significant

On adoption of the Plan, the Environmental Report that had been placed on public display alongside the Draft Plan was updated to become a final Environmental Report that is consistent with the adopted Plan, taking into account recommendations included in the submissions as well as changes that were made to the original Draft Plan that was placed on public display.

⁶ This response in the Chief Executive's Report included referencing SEA and Draft Plan/Proposed Material Alteration documents to explain:

- That there are various habitats across the Plan area that have been zoned with various Land Use Zoning Objectives;
- The implications of land use zoning for permissible uses – as is described in the Draft Plan document and as is normal planning practice;
- The appropriate taking into account of information, including that relating to biodiversity and flora and fauna;
- The appropriate detailing in the SEA Screening Report of potential effects, if unmitigated, mitigation measures for potential effects and residual adverse effects, including those with respect to biodiversity and flora and fauna; and
- That to be granted permission, proposed developments that satisfy the relevant Land Use Zoning Objective must comply with the provisions of the Local Area Plan and the County Development Plan, including those relating to the protection and management of biodiversity and flora and fauna.

Section 4 Summary of Alternatives considered

4.1 Introduction

As per the requirements of the SEA Directive, this SEA considers reasonable alternatives, which are capable of being implemented for the Plan, taking into account the objectives and the geographical scope of the Plan. Available alternatives are limited by the scope of the Plan. Galway County Council in preparing the Plan developed three alternatives for Clifden as detailed under Section 4.2. A summary of the evaluation of these alternatives is provided under Section 4.3 while the reasons for choosing the alternative for the Plan in the light of the other reasonable alternatives dealt with are provided under Section 4.4.

4.2 Summary of Alternatives

Alternative 1: Even Development (see Figure 4.1)

- Clifden to reach population allocation, resulting in balanced orderly development and implementation of the core strategy as contained in Chapter 2 of the Galway County Development Plan 2015-2021.
- The infrastructure required to be in place to achieve the growth targets is already in place or planned.
- Town Centre developments would be developed in a planned and coordinated manner focused within the town centre.
- Residential Development to take place on R1 lands during the lifetime of the Plan, unless a comprehensive justification is provided for alternative residential lands. R2 lands to be reserved for future development.
- Community development facilities to be developed on reserved lands in tandem with economic and residential growth.
- Business and Enterprise development would occur in the periphery close to existing infrastructure.
- Opportunity sites with clear design and proposed uses identified.
- Open Space and Recreational Lands would be preserved.

Alternative 2: Sporadic Development (see Figure 4.2)

- Clifden to reach population allocation contributing towards 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 Plan, unless an evidence based justification is provided for alternative residential lands.
- Community development facilities to be developed on reserved lands in tandem with economic and residential growth. Additional community lands to be provided under this Alternative along the Galway Road.
- Business and Enterprise development would occur at locations including those close to residential development.
- Town centre development would be sporadic and uncoordinated around the Town centre zonings with an easterly expansion occurring along the N59 Galway Road.
- Opportunity sites are identified but no clear guidance on the design parameters or uses identified.

Alternative 3: Haphazard Development

- Clifden to reach population allocation, contributing towards 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.
- Town centre development would be permitted throughout the plan area and not concentrated in the Town 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. This policy is applied to all lands within the Plan area – therefore there is no map for this alternative.

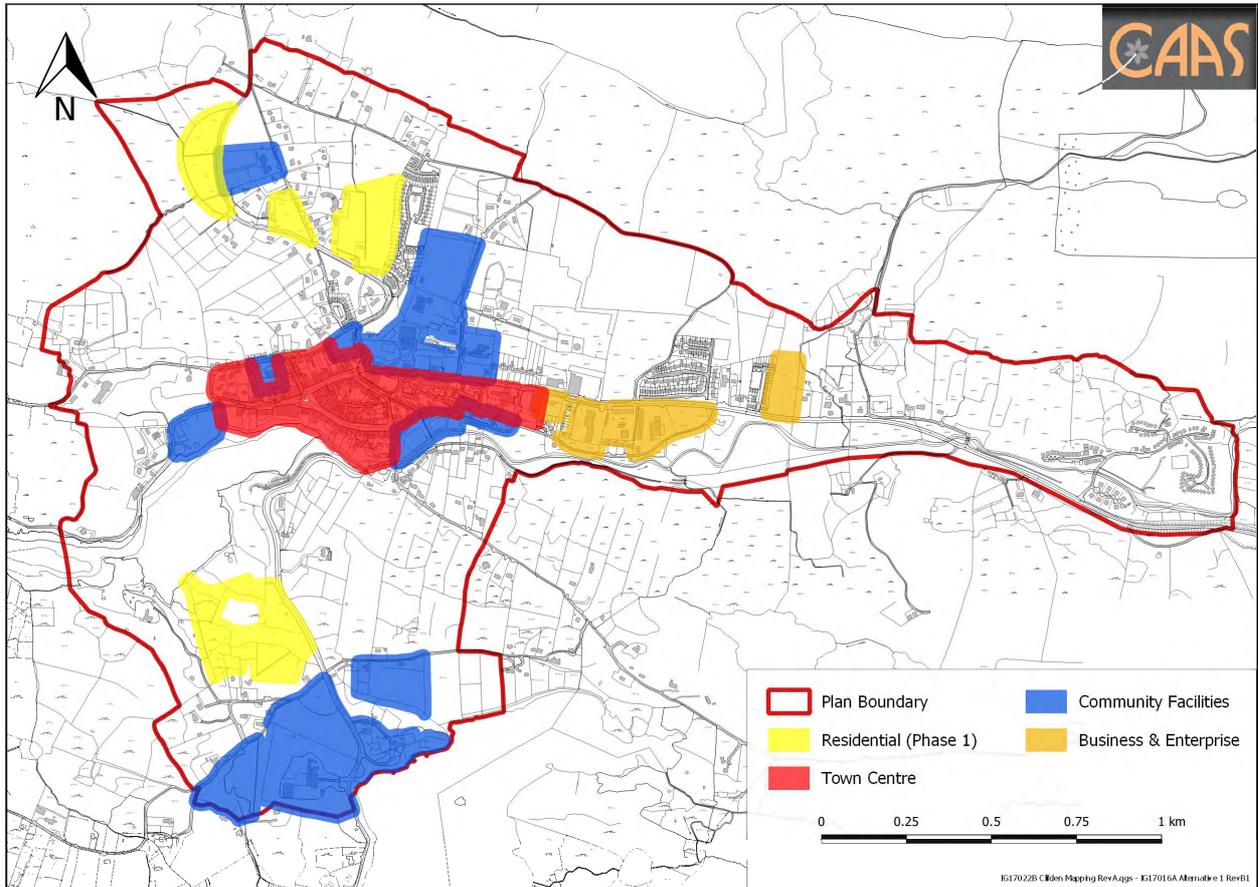
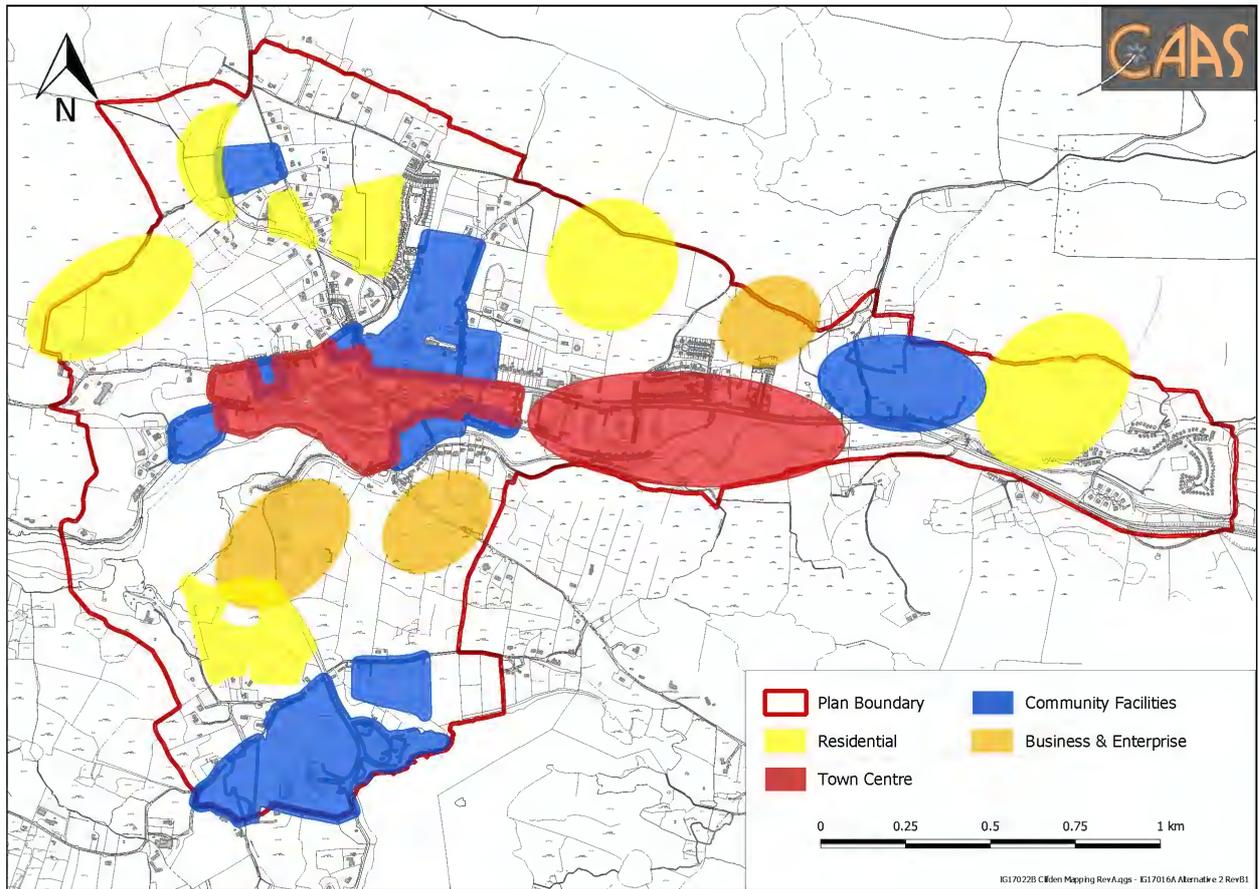


Figure 4.1 Alternative 1: Even Development



4.3 Summary of Evaluation of Alternatives

Significant Positive Effects Common to all Alternatives

By providing for development within the existing development boundary 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 Clifden area that are further from the town and less well serviced. This would be likely to result in significant positive environmental effects on environmental components as indicated on Table 4.1.

Table 4.1 Significant Positive Effects common to all Alternatives

Environmental Component	Significant Positive Effect, likely to occur
Biodiversity and Flora and Fauna	<ul style="list-style-type: none"> • Contributes towards protection of ecology (including designated sites, ecological connectivity, habitats) – due to increased utilisation of lands within the existing development boundary 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. • Sustains existing sustainable rural management practices - and the communities who support them - to ensure the continuation of long established managed landscapes and the flora and fauna that they contain
Population and Human Health	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Contributes towards protection of soil – due to increased utilisation of lands within the existing development boundary and use of existing utilities and brownfield sites. • Contributes towards protection of soil with respect to the provision of water services.
Water	<ul style="list-style-type: none"> • Contributes towards protection and management of ground and surface waters due to facilitating development within an established and serviced settlement centre.
Material Assets	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Contributes towards protection of cultural heritage in wider region by facilitating development within an existing settlement.
Landscape	<ul style="list-style-type: none"> • Contributes towards protection of wider landscape by facilitating development within an existing settlement.

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.

Potentially Significant Adverse Effects Common to all Alternatives

All of the alternatives provide for development of Clifden. 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 4.2. For the Plan, these effects will be mitigated by both provisions integrated into the Plan and existing provisions already in force through the County Development Plan.

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 4.2 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	<ul style="list-style-type: none"> ○ Arising from both construction and operation of development and associated infrastructure: <ul style="list-style-type: none"> ○ Loss of/damage to biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species, listed species, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna; ○ Habitat loss, fragmentation and deterioration, including patch size and edge effects; and ○ Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species.
Population and Human Health	<ul style="list-style-type: none"> ○ Potential interactions if effects upon environmental vectors such as water and air are not mitigated.
Soil	<ul style="list-style-type: none"> ○ Damage to the hydrogeological and ecological function of the soil resource.
Water	<ul style="list-style-type: none"> ○ 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	<ul style="list-style-type: none"> ○ 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	<ul style="list-style-type: none"> ○ Emissions to air including greenhouse gas emissions and other emissions.
Cultural Heritage	<ul style="list-style-type: none"> ○ Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities.
Landscape	<ul style="list-style-type: none"> ○ Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape, especially with regard to landscapes which are most valuable and most sensitive to change and protected focal points and views.

Evaluation of Individual Alternatives

By:

- Concentrating Residential development across a sufficient number of sites, closer to the Clifden's existing town centre;
- Providing for Town Centre developments in a planned and coordinated manner, focused within the town centre;
- Using existing or planned infrastructure;
- Developing community facilities in tandem with economic and residential growth;
- Providing for Business and Enterprise development in the periphery, close to existing infrastructure;
- Identifying opportunity sites with clear design and proposed uses identified; and
- Preserving Open Space and Recreational lands,

Alternative 1 'Even Development' would result in the greatest degree of significant positive effects (see Table 4.1) and least degree of potential conflicts (see Table 4.2).

By:

- Providing for Residential development across a larger number of sites than in comparison to Alternative 1, including some sites that are further away from the existing town centre;
- Providing for Town Centre developments in a sporadic and uncoordinated manner around town centre zonings and in an easterly expansion along the N59 Galway Road;
- Using existing, planned and additional infrastructure;
- Developing community facilities in tandem with economic and residential growth, in a less concentrated manner with additional lands zoned along the Galway Road;
- Providing for Business and Enterprise development at locations including those close to Residential lands; and
- Identifying opportunity sites but with no clear guidance on the design parameters or uses identified,

Alternative 2 'Sporadic Development' would result in a relatively moderate degree of significant positive effects (see Table 4.1) and a relatively moderate degree of potential conflicts (see Table 4.2).

In comparison to Alternative 2, development would be spread out over a greater number of sites, some not currently serviced and some Residential sites further from the settlement centre.

Additional infrastructure would be required to accommodate sporadic development, more than would be required for Alternative 1 'Even Development' and there would be higher conflicts between existing and proposed uses.

By:

- Not identifying opportunity sites;
- 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;
- Necessitating development to be serviced by private waste water treatment systems which would have to be properly maintained.

Alternative 3 'Haphazard Development' would result in the least degree of significant positive effects (see Table 4.1) and greatest degree of potential conflicts (see Table 4.2). Development would be spread out over the entire area associated with the settlement. Although requirements – 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 would help 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

4.4 Reasons for choosing the alternative for the Plan in the light of the other reasonable alternatives

The Selected Alternative for the Plan that emerged from the planning/SEA process is Alternative 1: Even Development. The text based and mapped provisions of the Plan (see accompanying Plan documents) facilitate the achievement of this alternative.

Alternative 1: Even Development 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.

Section 5 Monitoring Measures

5.1 Introduction

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

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

5.2 Indicators and Targets

Monitoring is based around indicators that allow quantitative measures of trends and progress over time relating to the Strategic Environmental Objectives identified on Table 7.1 and used in the evaluation. Each indicator to be monitored is accompanied by the target(s) that were identified with regard to the relevant strategic actions.

Table 5.1 shows the indicators and targets which have been selected for monitoring the likely significant environmental effects of implementing the Plan.

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.

5.3 Sources

Measurements for indicators generally come from existing monitoring sources. Existing monitoring sources include those maintained by the relevant authorities including the Council, 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 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.

5.4 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 monitoring⁷.

A stand-alone Monitoring Report on the significant environmental effects of implementing the Local Area Plan will be prepared within three years of adopting the Local Area Plan.

5.5 Thresholds

Thresholds at which corrective action will be considered include:

- The occurrence of flood events;
- Court cases taken by the Department of Arts, Heritage and the Gaeltacht regarding impacts upon archaeological heritage including entries to the RMP;

⁷ 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

- Complaints received from statutory consultees regarding avoidable environmental impacts resulting from development which is granted permission under the Plan; and
- Fish kills.

Table 5.1 Selected Indicators, Targets and Monitoring Sources

Environmental Component	Selected Indicator(s)	Selected Target(s)	Source (Frequency)
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 ⁸	<ul style="list-style-type: none"> 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 5.4).
	B2: Percentage loss of functional connectivity without remediation resulting from development provided for by the Plan	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	<ul style="list-style-type: none"> 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 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 B3ii: No significant impacts on the protection of species listed on Schedule 5 of the Wildlife Act 1976	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Consultations with the NPWS (at monitoring evaluation - see Section 5.4).
	B4: Population involved in land management	B4: Sustain the population involved in land management	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Consultations with EPA and Health Service Executive (at monitoring evaluation - see Section 5.4).
Soil	S1: Soil extent and hydraulic connectivity	S1: To minimise reductions in soil extent and hydraulic connectivity	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).

⁸ Except as provided for in Section 6(4) of the Habitats Directive, viz. There must be:

- no alternative solution available;
- imperative reasons of overriding public interest for the plan to proceed; and
- adequate compensatory measures in place.

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Environmental Component	Selected Indicator(s)	Selected Target(s)	Source (Frequency)
Water	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> ⁹ 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)	<ul style="list-style-type: none"> 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.
	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	<ul style="list-style-type: none"> 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: 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>	<ul style="list-style-type: none"> 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	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	<ul style="list-style-type: none"> 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	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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> CSO Population Data (every c. 5 years).

⁹ 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).

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Environmental Component	Selected Indicator(s)	Selected Target(s)	Source (Frequency)
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	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	<ul style="list-style-type: none"> • 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 5.4).
	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	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	<ul style="list-style-type: none"> • 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 5.4).
Landscape	L1: Number of complaints received from statutory consultees regarding avoidable impacts on the landscape - especially with regard to 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	L1: No developments permitted which result in avoidable impacts on the landscape - especially with regard to 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	<ul style="list-style-type: none"> • Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).