

SEA STATEMENT

FOR THE

GALWAY COUNTY DEVELOPMENT PLAN 2015-2021

STRATEGIC ENVIRONMENTAL ASSESSMENT

for: Galway County Council

Aras an Chontae,
Prospect Hill,
Galway



**Comhairle Chontae na Gaillimhe
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Section 1 Introduction

1.1 Terms of Reference

This is the SEA Statement of the Galway County Development Plan 2015-2021 Strategic Environmental Assessment (SEA).

1.2 SEA Definition

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.

1.3 Legislative Context

Directive 2001/42/EC of the European Parliament and of the Council, of 27 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 planning.

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 21 July 2004. The Regulations have been amended by the European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011 (SI No. 200 of 2011) and the Planning and Development (SEA) (Amendment) Regulations 2011 (SI No. 201 of 2011).

Article 7 of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004) as amended requires that Strategic Environmental Assessment is undertaken for the preparation of certain Development Plans. This Statement is

referred to as an SEA Statement (DEHLG, 2004)¹.

1.4 Content of the 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 [this is 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 implementation of the Plan.

1.5 Implications of SEA for the Plan

SEA has been undertaken 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 which were made on foot of submissions.

Members of the planning authority have taken into account the findings of all relevant SEA output during their consideration of the Draft Plan and before its adoption.

¹ Department of Environment, Heritage and Local Government (2004) *Implementation of SEA Directive (2001/42/EC): Guidelines for Regional Authorities and Planning Authorities* Dublin: Government of Ireland.

Section 2 How Environmental Considerations were integrated into the Plan

2.1 Introduction

Environmental considerations were integrated into the Plan through:

- Consultations with environmental authorities;
- Communication of environmental sensitivities through the SEA and associated Appropriate Assessment (AA) and Strategic Flood Risk Assessment (SFRA); and
- Suggestions of Plan provisions to mitigate effects.

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 Council: Environmental Protection Agency; Department of Communications, Energy and Natural Resources; Department of Agriculture, Fisheries and Food; Department of the Environment, Community and Local Government; Department of Arts, Heritage and the Gaeltacht; and adjoining planning authorities whose areas are contiguous to the administrative area of Galway County Council.

Submissions were made by the Environmental Protection Agency and the Department of Arts, Heritage and the Gaeltacht and these were taken into account during the formulation of the scope of the SEA. Further detail on these submissions is provided under Section 3.2.

In addition, submissions were made on the Draft Plan and SEA Environmental Report while they were on public display (see Section 3.3).

2.3 Communication of environmental sensitivities

2.3.1 Overview

Environmental considerations were integrated into the Draft Plan before it was placed on public display for the first time.

Environmental sensitivities were mapped in order to identify which areas of the County would be most sensitive to development and would suffer the most adverse effects if growth was to be accommodated in those areas unmitigated.

The sensitivities were communicated to the Plan-making team on a regular basis from the outset of the Plan preparation process. Identifying areas with the most limited carrying capacity within the Plan area helped future growth to be diverted away from these areas.

The sensitivities considered by the SEA, AA and SFRA include the following:

- Natura 2000 Sites;
- EPA Ecological Network Classes;
- NHAs and pNHAs;
- Freshwater Pearl Mussel Sensitive Areas;
- Entries to Registers of Protected Areas;
- CORINE Land Cover Data;
- Soil Type;
- Landslides;
- Water Framework Directive (WFD) Surface Water Status;
- Q-Values at Points on Rivers;
- WFD Status of Groundwater;
- Aquifer Productivity;
- Aquifer Vulnerability;
- Historical Flood Risk Indicators;
- Waste Water Treatment capacity and demand;
- Drinking water supply and quality;
- Archaeological Heritage;
- Architectural Heritage;

- Landscape Character Areas, Values, Sensitivity; and
- Focal Points and Views.

A number of these sensitivities are mapped on Figure 2.1, Figure 2.2 and Figure 2.3.

In order to identify where most sensitivities within the County occur, a number of the environmental sensitivities listed above were weighted and mapped overlapping each other. Figure 2.4 provides an overlay of environmental sensitivities for the County. This overlay mapping shows that environmental sensitivities are not evenly distributed throughout the County.

Lough Corrib and parts of the western half of the County (including Connemara and the coast) comprise the greatest extent of sensitive areas (ranging from low to acute) on account of sensitivities including: ecological (multiple, overlapping designations); hydrological (multiple, overlapping designations); and landscape (multiple, overlapping designations).

Areas in close proximity to the County's border with Roscommon, Offaly and Tipperary are similarly sensitive. These areas include the water bodies of the River Shannon and Lough Derg as well as adjacent areas (sensitivities including hydrological, ecological, landscape and flood risk).

Other areas with heightened levels of sensitivities include the indented coastline to the south of Oranmore, smaller lakes in the east of the County (including Lough Cutra, Lough Rea, Coole Lough, Kiltullagh Lough and Glenamaddy Turlough) and areas to the west of Gort (sensitivities including flood risk related sensitivities).

The remainder of the County is generally of low or moderate vulnerability.

The occurrence of multiple sensitivities in any location does not preclude development; rather it flags at a strategic level that the mitigation measures - which have already been integrated into the Plan as policies and objectives - will need to be complied with in order to ensure that the implementation of the Plan contributes towards environmental protection.

2.3.2 Appropriate Assessment

A Stage 2 Appropriate Assessment (AA) has been undertaken alongside the Plan.

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

The AA concluded that the Plan will not affect the integrity of the Natura 2000 network².

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

2.3.3 Strategic Flood Risk Assessment

A Strategic Flood Risk Assessment (SFRA) has been undertaken alongside the preparation of the new Plan.

The requirement for SFRA is provided under 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (DEHLG, 2009).

The preparation of the Plan, SEA and SFRA has taken place concurrently and the findings of the SFRA have informed both the Plan and the SEA. All recommendations made by the SFRA have been integrated into the Plan.

2.4 Suggestions of Plan provisions to mitigate effects

The SEA, AA and SFRA processes suggested various measures for integration into the Plan as provisions (policies and objectives) in order to mitigate the effects of implementing the Plan and to contribute towards environmental protection and sustainable development.

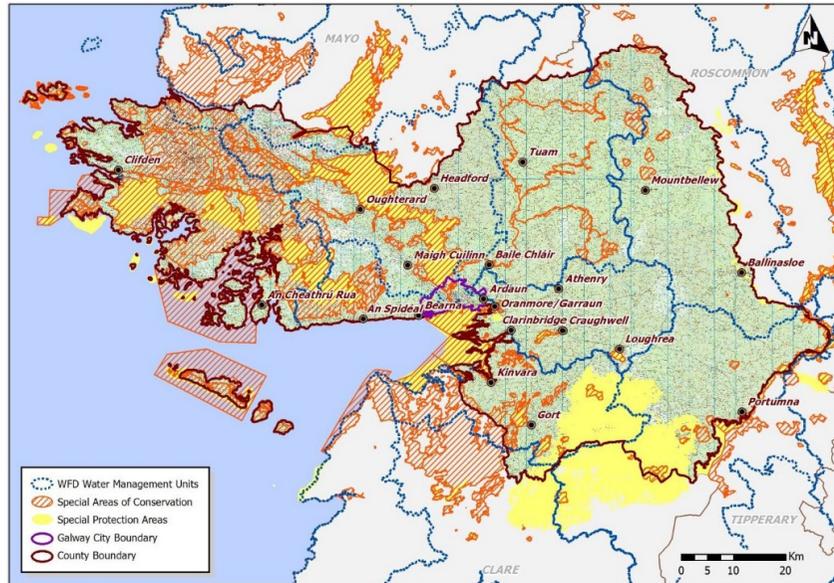
Mitigation measures are measures envisaged to prevent, reduce and, as fully as possible, offset

² Except as provided for in Section 6(4) of the Habitats Directive, viz. There must be:

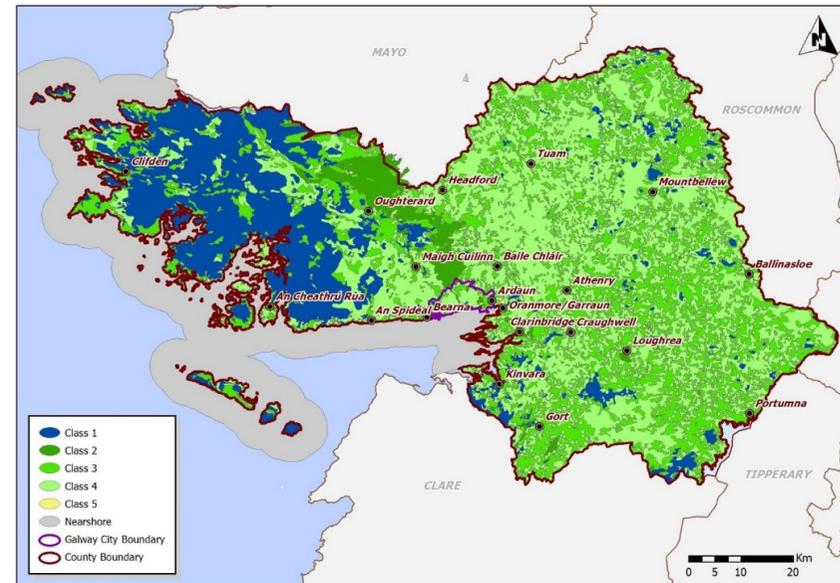
- (a) no alternative solution available;
- (b) imperative reasons of overriding public interest for the plan to proceed; and
- (c) adequate compensatory measures in place.

any significant adverse impacts on the environment of implementing the Plan.

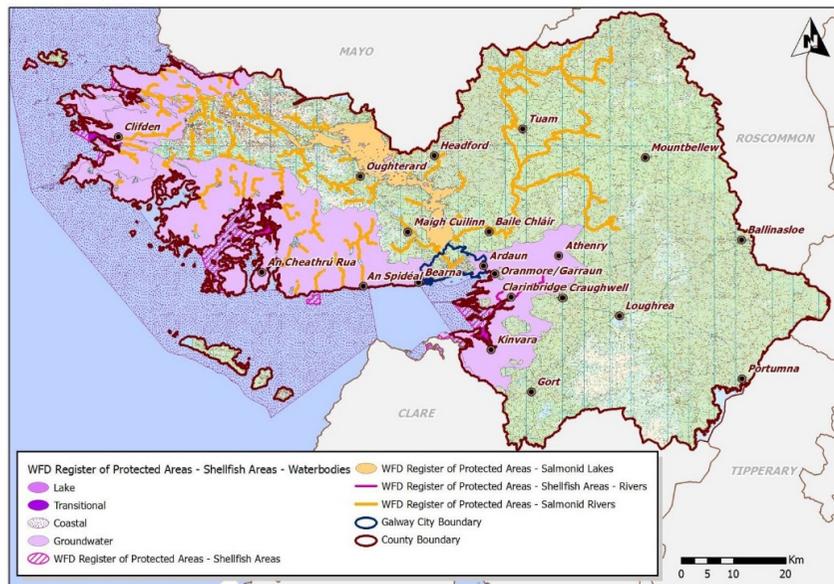
Table 2.1 identifies the key mitigation measure(s) which have been integrated into the Plan in response to the likely significant environmental effect which would occur as a result of Plan implementation in the absence of mitigation. The integration of these measures into the Plan occurred over a number of iterations and was informed by various communications through the SEA process.



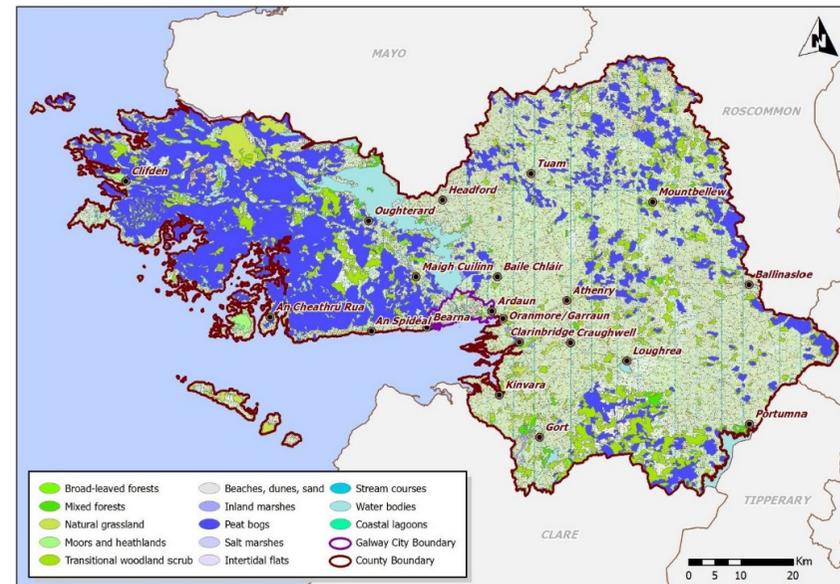
Natura 2000 Sites



Ecological Network Classes



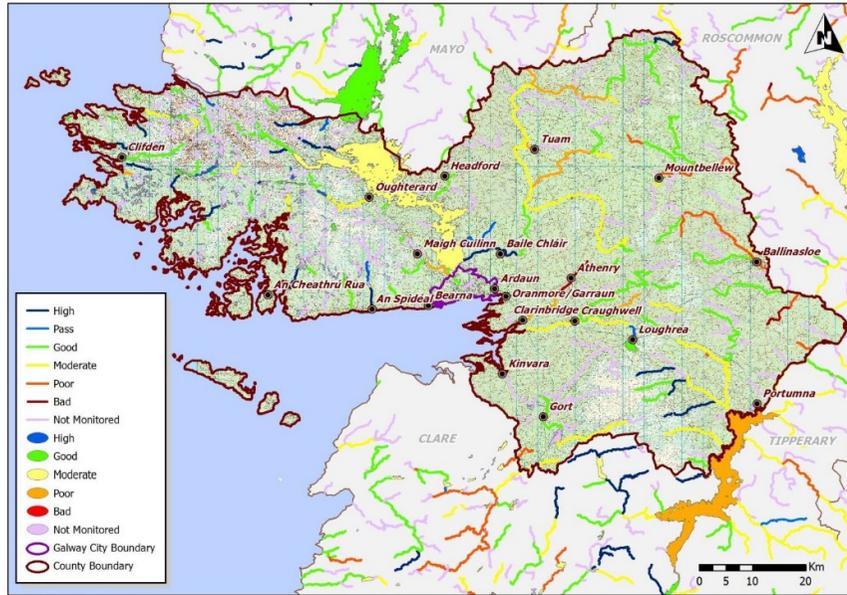
Entries to the Registers of Protected Areas



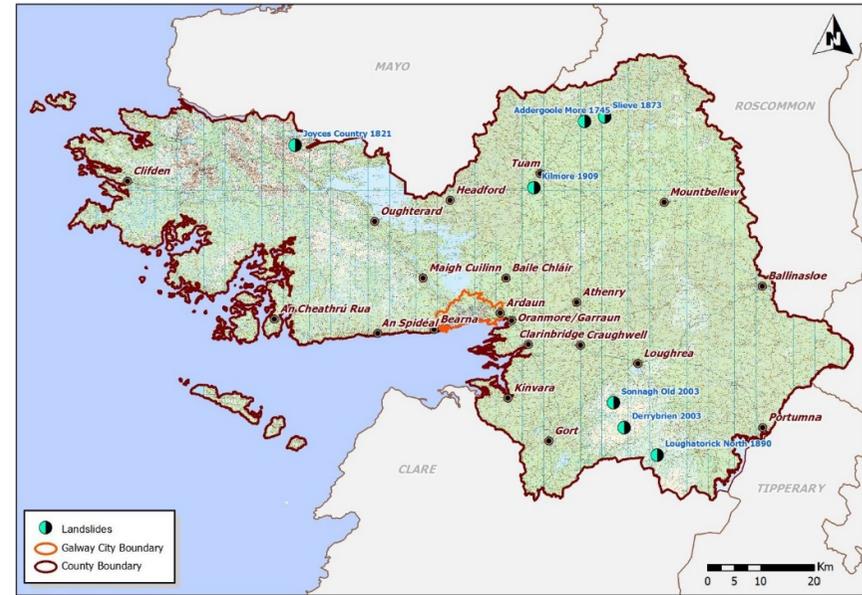
CORINE Sensitive Land Cover Data

Figure 2.1 Selection of Environmental Sensitivities (Set 1 of 3)

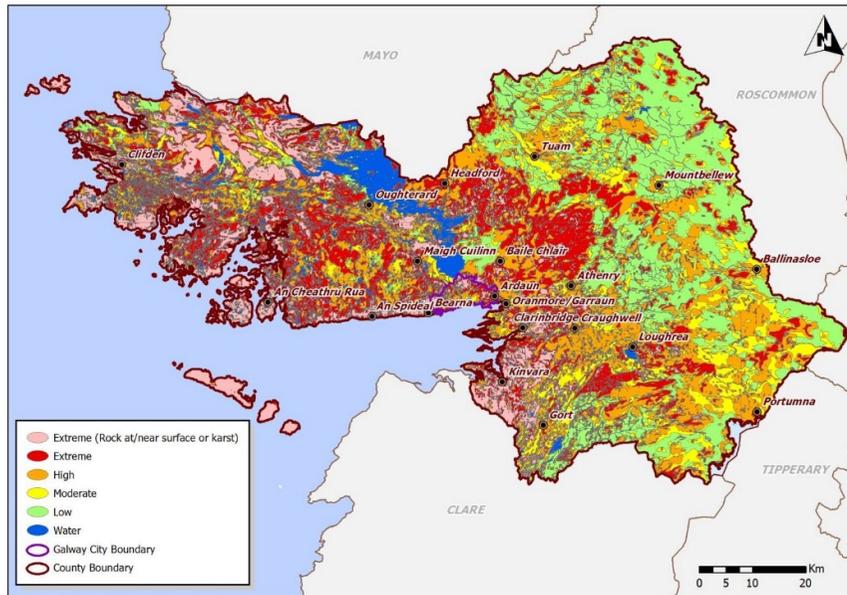
CAAS Ltd. for Galway County Council



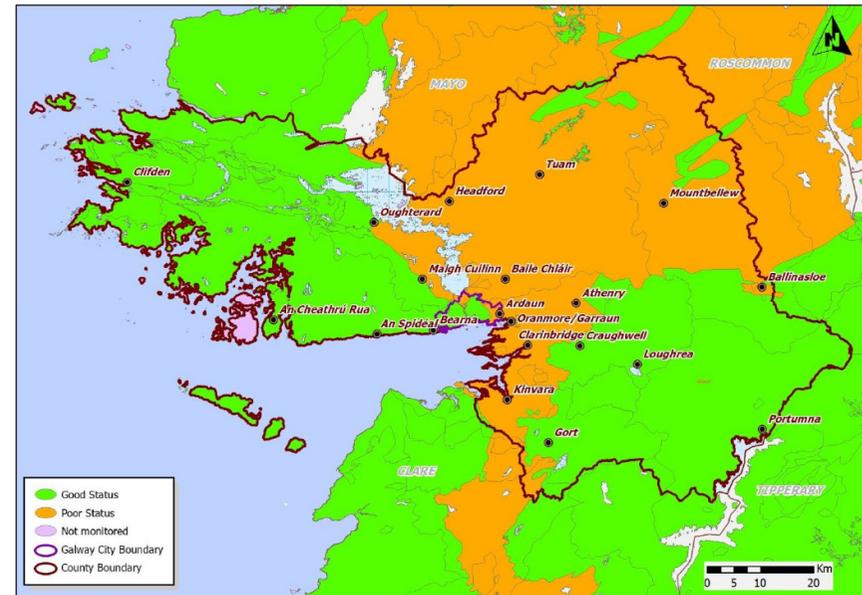
River and Lake Status



Landslides



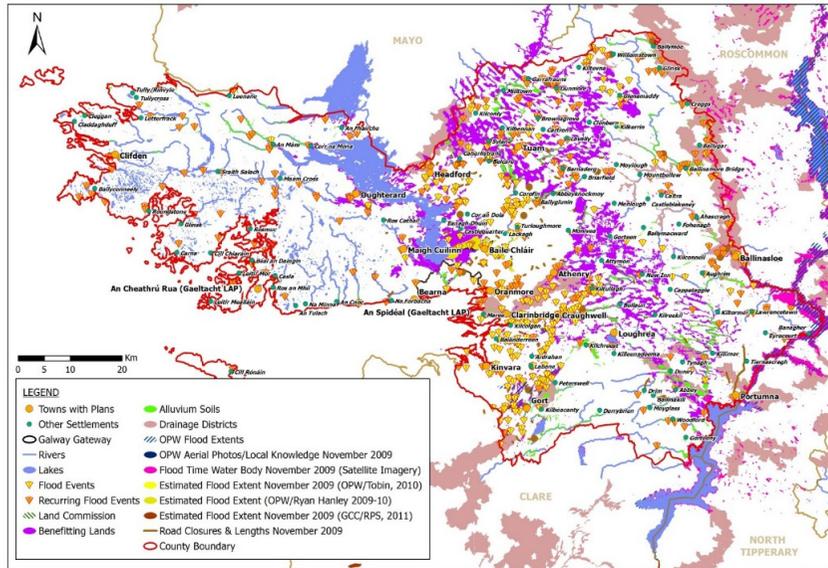
Aquifer Vulnerability



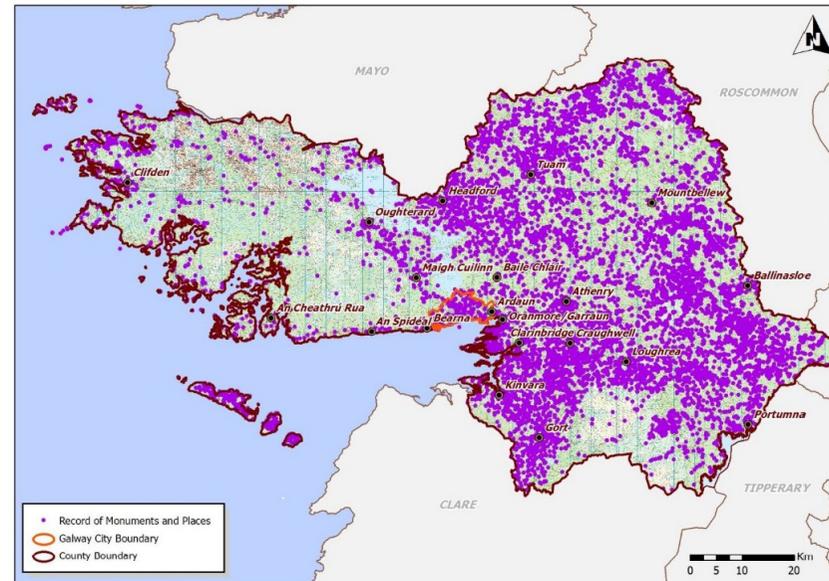
Groundwater Status

Figure 2.2 Selection of Environmental Sensitivities (Set 2 of 3)

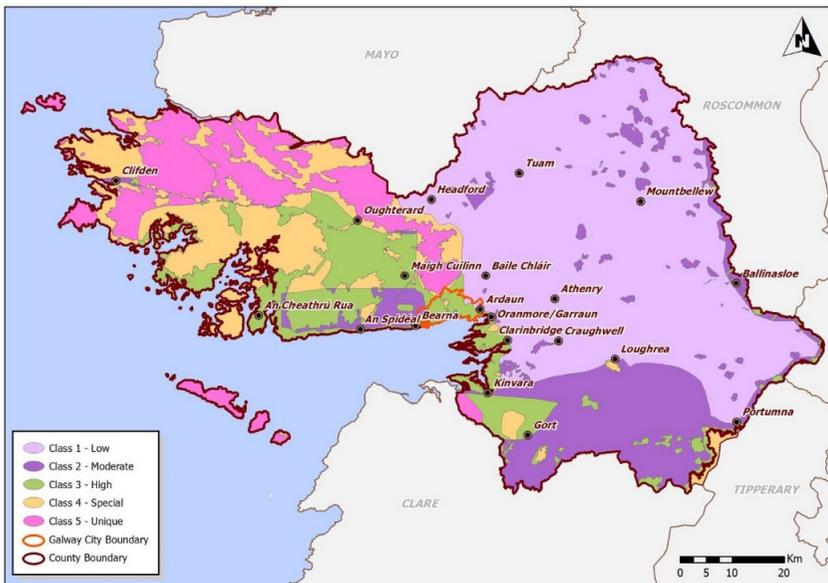
CAAS Ltd. for Galway County Council



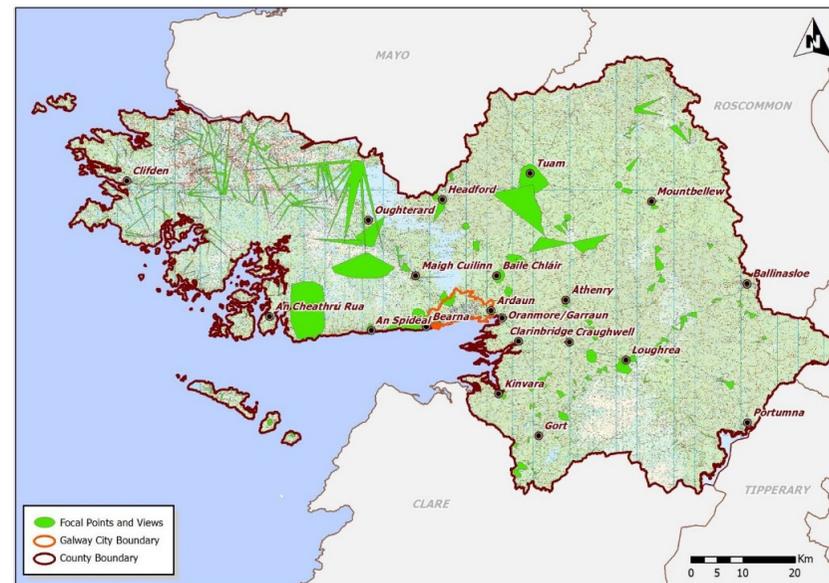
Historical Flood Information



Cultural Heritage



Landscape Sensitivity Classification



Focal Points and Views

Figure 2.3 Selection of Environmental Sensitivities (Set 3 of 3)
CAAS Ltd. for Galway County Council

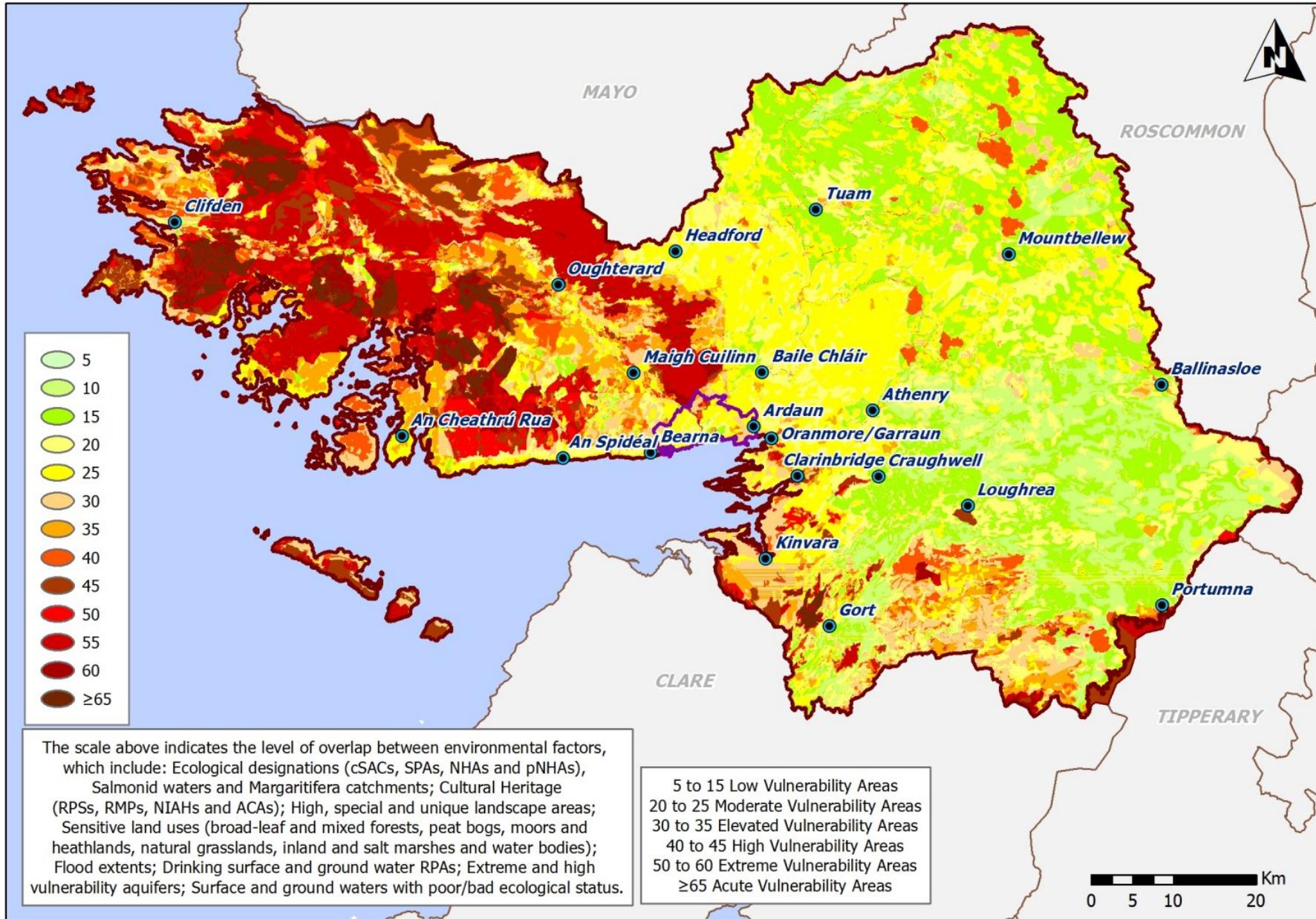


Figure 2.4 Overlay of Environmental Sensitivities

Source: CAAS (2014)

Table 2.1 Mitigation Measures

Likely Significant Effect, if unmitigated	Mitigation Measures (references from the Plan), including:
Loss of biodiversity with regard to Natura 2000 Sites and Annexed habitats and species & Loss of biodiversity with regard to designated sites including Wildlife Sites and species listed on Schedule 5 of the Wildlife Act 1976	<ul style="list-style-type: none"> • Policies NHB 1, NHB 5, NHB 6, NHB 7 and NHB 8 • Objectives DS 6, DS 9, EQ1, EQ 4, ICT 1, NHB 1, NHB 4, NHB 5, NHB 6, NHB 7, NHB 13, AFF 6 and DS10
Loss of biodiversity with regard to ecological connectivity and stepping stones	<ul style="list-style-type: none"> • Policies NHB 2 and NHB 3 • Objectives NHB 2, NHB 8, NHB 10 and NHB 11
Loss of population of the County involved in land management	<ul style="list-style-type: none"> • Policy NHB 8 and Objective NHB 13 • Also see various measures providing for populations in rural and supporting areas.
Spatially concentrated deterioration in human health	<ul style="list-style-type: none"> • Policy CC 8 • Objectives TI 13 and EQ 2 • Also see measures related to soil, water quality, flooding, waste water treatment and drinking water supply and quality.
Damage to the hydrogeological and ecological function of the soil resource	<ul style="list-style-type: none"> • Objective NHB12 • Also see measures related to water quality and waste water treatment.
Adverse impacts upon the status and quality of water bodies, including bathing waters	<ul style="list-style-type: none"> • Policies NHB 4 and AFF 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 2, FL 3 and RA 1
Increase in the risk of flooding	<ul style="list-style-type: none"> • Policies FL 1, FL 2, FL 3, FL 4 and FL 5 • Objectives FL 1, FL 2, FL 3, FL 4, FL 5, FL 6, DS 7, DS 8 and DS 9
Failure to provide adequate and appropriate waste water treatment & Failure to comply with drinking water regulations and serve new development with adequate drinking water that is both wholesome and clean	<ul style="list-style-type: none"> • Policies WS 1 WS 2 WS 3 WS 4 WS 5 WS 6 WW 1 • 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, CS 4, RHO -5 and EDT 5
Failure to contribute towards sustainable transport and associated impacts (including emissions)	<ul style="list-style-type: none"> • Strategic Aims 6 and 7 • Policies CC 1, CC 7, TI 1, TI 2, TI 3 and TI 4 • Objectives DS 1, DS 2, DS 3, CS 3, CS 5, TI 1, TI 2, TI 3, TI 4, TI 16, TI 17, TI 18, TI 19, DS 8, CC 2 and CC 4
Increases in waste levels	<ul style="list-style-type: none"> • Policies WM 1 and WM 2 • Objectives WM 1, WM 2, WM 3, WM 4, WM 5 and WM 6
Effects on entries to the Record of Monuments and Places and other archaeological heritage	<ul style="list-style-type: none"> • Policies ARC 1, ARC 2, ARC 3, ARC 4 and ARC 5 • Objectives ARC 1, ARC 2, ARC 3, ARC 4, ARC 5, ARC 6 and ARC 7
Effects on entries to the Records of Protected Structures, Architectural Conservation Areas and other architectural heritage	<ul style="list-style-type: none"> • Policies AH 1 and AH 2 • Objectives AH 1, AH 2, AH 3, AH 4, AH 5, AH 6, AH 7, AH 8, AH 9, AH 10 and AH 11
Occurrence of adverse visual impacts	<ul style="list-style-type: none"> • Policy LCM 1 • Objectives LCM 1, LCM 2, LCM 3, FPV 1 and WH 1
Other – Climate Adaptation	<ul style="list-style-type: none"> • Strategic Aim 11 • Policies CC 2, CC 3, CC 4, CC 5 and CC 6 • Objectives CC 1, CC 3, CC 5.

Section 3 Environmental Report and Submissions & Observations

3.1 Introduction

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

3.2 SEA Scoping Submissions

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 Council: Environmental Protection Agency; Department of Communications, Energy and Natural Resources (DCENR); Department of Agriculture, Fisheries and Food; Department of the Environment, Community and Local Government; Department of Arts, Heritage and the Gaeltacht; and adjoining planning authorities whose areas are contiguous to the administrative area of Galway County Council. Submissions were made by the Environmental Protection Agency and the Department of Arts, Heritage and the Gaeltacht and these were taken into account during the formulation of the scope of the SEA.

The issues raised by the EPA submission and responses to these issues, reproduced from the SEA Scoping Report, are detailed on Table 3.1 below.

No.	Issue Raised	SEA/AA/SFRA Response contained in SEA Scoping Report
1.	You are referred to the EPA previous submission, dated 17th June 2013 and attached for reference, including an SEA Scoping Pack and Integration of Environmental Considerations Checklist, which should be taken into account at this time	This submission – including the scoping pack and integration of environmental considerations checklist – has been taken into account in the preparation of this report and will be taken into account beyond the finalisation of this document – including in the recommendation of mitigation measures – and throughout the SEA, SFRA and AA processes.
2.	Guidance on the SEA Scoping Process is available on the EPA website and should be considered in the preparation of the SEA. This can be consulted at the following address: http://www.epa.ie/pubs/advice/ea/	This guidance has been taken into account in the preparation of this report and will be taken into account during the continuous scoping of the SEA.
3.	The European Commission have recently published " <i>Guidance on Integrating Climate Change and Biodiversity into Strategic Environmental Assessment</i> " which can be found at the following link: http://ec.europa.eu/environment/eia/pdf/SEA%20Guidance.pdf Other recently published data include the EPA's updated <i>Integrated Water Quality Reports</i> , <i>Air Quality in Ireland</i> and the <i>National Waste Report</i> . Links to these documents are available in the Scoping Pack, available on http://www.epa.ie/pubs/advice/ea/ . Additional information is also available at http://www.epa.ie/monitoringassessment/ The Heritage Council recently launched a Heritage Map Viewer, accessible by local authorities, which may provide relevant information. Your attention is also brought to the Integrated Water Quality Report 2012 for Galway, Mayo & Sligo (EPA, 2012) http://www.epa.ie/pubs/reports/water/waterqua/ which should be integrated as relevant and appropriate.	These data sources will be consulted while undertaking the SEA.

4.	The National Parks and Wildlife Service should be consulted regarding Natura 2000 sites, availability of data. For SEA, the zone of influence should extend to cover any areas that have the potential to be impacted upon by the Plan. This should include potential hydrological implications, landscape/visual impacts, transboundary effects, cumulative/in-combination effects, etc.	The NPWS were sent the earlier version of this report which queried 'Is there country-wide information available on the zone of influence of Natura 2000 sites?' however no response to this question were included in the submission from the NPWS/DAHG. Zone of influence will be referred to in the SEA Environmental Report.
5.	The scoping should include potential impacts to local biodiversity features such as hedgerows, wetlands and ponds, woodlands etc., which are important at the local scale. The presence of geological feature of local/county/national importance should also be considered. The Plan should consider developing/promoting the development of a green infrastructure strategy and SUDs strategy for the County. The development of appropriate cycle/walking routes should also be considered, taking into account the potential for conflict with Natura 2000 sites and their conservation objectives. The Plan should take into account the West and Shannon CFRAMS, currently undergoing SEA. The Dawros and Owenriff Freshwater Pearl Mussel should also be taken into account in the environmental assessment of the Plan.	SEA Scoping Report Table 4.1 has been updated to take account of these comments. It is noted that Galway is one of the counties for which a <i>County Geological Sites Audit</i> has not been prepared to date. The SEA and AA will consider potential conflicts with Natura 2000 sites including those which may from cycle/walking routes. Recommendations regarding SUDs and Green Infrastructure will be taken into account by the SEA as will the emerging CFRAMS.
6.	The list of potential mitigation measures is noted, however it should be ensured that the potential for cumulative effects is also assessed and mitigated for, where relevant. Where mitigation measures and/or recommendations are put forward in the Environmental Report and Habitats Directive Natura Impact Report, these should be incorporated as policies/objectives of the Plan. Both the Plan and the Environmental Report should document how the mitigation measures have been integrated into the Plan.	These issues will be taken into account during undertaking the SEA and AA. Effects, including those which are cumulative, will be assessed and mitigated for. Both the Plan and the Environmental Report will document how the mitigation measures have been integrated into the Plan.
7.	It should be ensured that "The Planning System and Flood Risk Management Guidelines for Planning Authorities (DEHLG/OPW, 2009)" are fully implemented in the preparation of the Plan, and in the development of the Plan area, as a specific objective/policy.	This is noted. The SFRA/SEA will be recommending such a measure.
8.	Further comment will be provided by the Agency upon receipt of the Draft Environmental Report and Plan and associated documents during the next statutory consultation phase of the SEA Process.	These comments will be taken into account after the next statutory consultation phase.
9.	Two amending SEA Regulations were signed into Irish law on 3 rd May 2011, amending the original SEA Regulations, and should be referenced and integrated into the Plan and SEA process as appropriate: <ul style="list-style-type: none"> • European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011, (S.I. No. 200 of 2011), amending the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (S.I. No. 435 of 2004), and • Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011, (S.I. No. 201 of 2011), amending the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. No. 436 of 2004). <p>The DoECLG Circular (PSSP 6/2011) '<i>Further Transposition of the EU Directive 2001/42/EC on Strategic Environmental Assessment (SEA)</i>' should also be referred to and integrated into the Plan.</p> <p>Your attention is also brought to the recent DoECLG Circular (Circular PL 9 of 2013) '<i>Article 8 (Decision Making) of EU Directive 2001/42/EC on Strategic Environmental Assessment (SEA) as amended</i>' which should be taken into account during the preparation of the Draft Plan and in undertaking the SEA process.</p> <p><i>European Communities (Birds and Natural Habitats) Regulations 2011</i></p>	The SEA (and AA and SFRA) will ensure compliance with the following legislation: <ul style="list-style-type: none"> • The SEA Directive and the Habitats and Birds Directives; • The Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. No. 436 of 2004); • The Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011 (S.I. No. 201 of 2011); • The Planning and Development Acts 2000 to 2011; and, • The European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011). <p>In addition to complying with the legislation, the processes will be undertaken taking into account the following guidance:</p> <ul style="list-style-type: none"> • <i>Implementation of SEA Directive (2001/42/EC): Guidelines for Regional Authorities and Planning Authorities.</i> Department of the Environment, Heritage and Local Government, 2004. • <i>Further Transposition of the EU Directive 2001/42/EC on Strategic Environmental Assessment (SEA).</i> DECLG Circular (PSSP 6/2011). • <i>Article 8 (Decision Making) of EU Directive 2001/42/EC on Strategic Environmental</i>

<p>The requirements of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011), should also be taken into account in implementing the Plan.</p> <p><i>Environmental Authorities</i> Under the SEA Regulations (S.I. No. 436 of 2004), as amended by S.I. No. 201 of 2011 notice should be given to the following:</p> <ul style="list-style-type: none"> • The Environmental Protection Agency • The Minister for the Environment, Community & Local Government • Minister for Agriculture, Marine and Food, and the Minister for Communications Energy and Natural Resources, where it appears to the planning authority that the plan or programme, or modification of the plan or programme, might have significant effects on fisheries or the marine environment • where it appears to the competent authority that the plan or programme, or amendment to a plan or programme, might have significant effects in relation to the architectural heritage or to nature conservation, the Minister for Arts, Heritage and Gaeltacht Affairs, and • any adjoining planning authority whose area is continuous to the area of a planning authority which prepared a draft plan, proposed variation or local area plan. <p>A copy of your decision regarding the determination should be made available for public inspection at your offices, local authority website and should also be notified to any Environmental Authorities already consulted.</p>	<p><i>Assessment (SEA) as amended.</i> DECLG Circular (PL9/2013).</p> <ul style="list-style-type: none"> • <i>Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities.</i> Department of the Environment, Heritage and Local Government, 2009, • <i>Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC,</i> European Commission Environment DG, 2000, and; • <i>Managing Natura 2000 sites: The Provisions of Article 6 of the Habitats Directive 92/43/EEC:</i> European Commission, 2000 • <i>Guidance on Integrating Climate Change and Biodiversity into Strategic Environmental Assessment,</i> European Commission, 2013
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Table 3.1 Environmental Protection Agency SEA Scoping Submission and Response

The issues raised by the DAHG submission and responses to these issues, reproduced from the SEA Scoping Report, are detailed on Table 3.2 below.

No.	Issue Raised	SEA/AA/SFRA Response contained in SEA Scoping Report
1.	Reference is also made to the advice given by representatives of this Department at the meetings of 12/04/13 and 30/05/13. A list of key legislation, guidance and circulars is included in Appendix 1 and should be taken into account and followed as appropriate.	Key legislation, guidance and circulars and relevant advice has been taken into account in the preparation of this report and will be taken into account beyond the finalisation of this document and throughout the SEA, SFRA and AA processes.
2.	<p>You are advised to consult the National Parks and Wildlife Service website (www.npws.ie) as a key source of data, information and publications on nature conservation sites and biodiversity issues of relevance to the plan and its associated environmental assessments. Boundary data can be downloaded for Special Areas of Conservation (SACs, currently known as candidate sites but fully legally protected), Special Protection Areas (SPAs), Natural Heritage Areas (NHAs), and proposed Natural Heritage Areas (pNHAs). Additional information that is readily available from the website is outlined below. NPWS-held data on habitats and species may also be requested by submitting a 'Data Request Form'.</p> <p>As site boundaries of nature conservation sites may be subject to change, and additional information will become available over time, the Council is advised to ensure that the most up-to-date information and data available from the NPWS website are used in the plan and in any associated environmental assessments at each successive stage of the plan-making process.</p>	<p>This data has been used in the preparation of this report and will be taken into account throughout the SEA, AA and SFRA processes.</p> <p>It is noted that changes may occur and these will be taken into account where possible.</p>

3.	<p>Co. Galway supports a wealth of sites, habitats and species of international to local importance for biodiversity and nature conservation. These form ecological networks locally and interconnecting with other counties and offshore.</p> <p>The plan area contains the following:</p> <ul style="list-style-type: none"> _ European (Natura 2000) sites, including (candidate/proposed) Special Areas of Conservation (cSACs) and Special Protection Areas (SPAs). These are sites of international importance for nature conservation and form part of Ireland's contribution to the Natura 2000 network within the EU. Available information includes: locations, site synopses, Natura 2000 standard data forms, SAC datasheets, qualifying interests (SACs), special conservation interests (SPAs), and Statutory Instruments (SPAs). See also below in relation to conservation objectives and appropriate assessment _ NHAs established under the Wildlife (Amendment) Act, 2000, and legally protected under the Wildlife Acts, 1976-2000. These are sites of national importance for nature conservation. Available information includes: locations, site synopses and Statutory Instruments _ Other protected areas, e.g. Connemara National Park, Nature Reserves, and Wildfowl Sanctuaries (see S.I. 192 of 1979) _ Proposed Natural Heritage Areas (pNHAs) not covered by other nature conservation designations. These are undesignated sites that are known to be of some importance for biodiversity but have not yet been fully evaluated _ 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 _ Other species of flora and fauna and their key habitats which are protected under the Wildlife Acts, 1976-2000, wherever they occur _ Freshwater Pearl Mussel sensitive areas, including the Corrib - Owenriff and Dawros catchments listed in S.I. 296 of 2009, and other catchments shown in the current version of the '<i>Margaritifera</i> Sensitive Areas' map (downloadable from http://www.npws.ie/mapsanddata/habitatspeciesdata/). _ 'Protected species and natural habitats' as defined in the Environmental Liability Directive (2004/35/EC) and European Communities (Environmental Liability) Regulations, 2008, including: <ul style="list-style-type: none"> _ Birds Directive – Annex I species and other regularly occurring migratory species, and their habitats (wherever they occur) _ 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) _ Stepping stones and ecological corridors including nature conservation sites (other than Natura 2000 sites), habitat areas and species locations covered by Article 101 of the Habitats Directive, including areas of ecological importance identified through habitat surveys of the plan area <p>All the above should be taken into account in preparing the new plan, and in undertaking its associated environmental assessments.</p> <p>Objectives to conserve and protect the above biodiversity should be included in the plan, taking the wider aims and obligations of the Habitats Directive (e.g. Article 6(2), 10, 12-16), and the Birds Directive (e.g. Article 4(4)) into account.</p> <p>As in the current plan, the new plan should include a natural heritage chapter. Of the recent plans prepared in Co. Galway, Gort Local Area Plan is recommended as the model to follow.</p> <p>All terminology and wording in the plan should be checked for accuracy as per current planning legislation, Directives and guidance.</p>	<p>These components of biodiversity and flora and fauna will be taken into account by the Plan preparation, SEA and AA processes as relevant.</p>
4.	<p>The following are of potential concern in relation to the plan: water supply and abstraction; wastewater and discharges; flood alleviation and prevention; new infrastructure, particularly roads, powerlines and telecommunications; and amenity and recreation provision where this could impact nature conservation sites and/or sensitive species.</p>	<p>The potential significant effects arising from provisions relating to these issues will be assessed in the SEA.</p>

5.	<p>All plans and variations to plans require screening for appropriate assessment in accordance with Regulation 42 of the European Communities (Birds and Natural Habitats) Regulations, 2011, and Part XAB of the Planning and Development Act, 2000, as amended. Screening will suffice only if it can be concluded, based on objective information, that a plan or an amendment to a plan, alone and in combination with other plans and projects, poses no risks of having significant effects on a European site in view of its conservation objectives. In the event that there are risks of significant effects, appropriate assessment and the preparation of a Natura Impact Report (NIR) will be required.</p> <p>Owing to the number of European sites in the plan area, or potentially affected by the plan, and the range and sensitivities of the habitats and species these sites support, it is considered that appropriate assessment is required in this case.</p> <p>Screening and the NIR should focus on the likely significant effects of the plan on European sites in view of their conservation objectives, taking in combination effects of other plans and projects into account at screening stage. A screening distance of 15km outside the plan area is recommended in current guidance but screening should focus on the sites and ecological receptors that are at risk. A catchment based approach is recommended for sites that support surface water or groundwater dependent habitats and species that are SAC qualifying interests or SPA special conservation interests (see Tables 5.1 and 5.3 in Mayes, 20082).</p> <p>Generic conservation objectives are currently available for all European sites from www.npws.ie. In addition, detailed site specific conservation objectives are available for some sites; those that are available can be accessed from the NPWS website – see list in Appendix 2, including Slyne Head Islands cSAC (site code 000238), Kingstown Bay cSAC (site code 002265), Galway Bay Complex cSAC (site code 000268) and Inner Galway Bay SPA (site code 004031) in Galway. Supporting GIS data are available from http://www.npws.ie/mapsanddata/habitatspeciesdata/. Site specific conservation objectives are likely to become available for more sites in the time the plan is in preparation.</p> <p>Rigorous and reasoned screening should be undertaken to determine what European sites, and which of their qualifying interests or special conservation interests, require (or can be omitted from) further detailed assessment in the NIR, taking conservation objectives and potential in combination effects of other plans and projects into account. The screening process should be documented clearly, and all necessary scientific evidence and reasoning in support of conclusions reached should be presented. Where site specific conservation objectives are available, screening should be undertaken with respect to the relevant attributes and targets that determine favourable conservation condition. Screening will assist in identifying plan elements that pose risks of adverse effects that can be highlighted for modification, mitigation or further assessment in the NIR.</p> <p>Mitigation in the plan may include, among other things, setting out provisions to demonstrate that lower level plans or projects will be subject to appropriate assessment where necessary. However, if policies and objectives are made conditional on adequate evaluations and assessments being undertaken at lower plan level or at project level, it is advised that, as a minimum, these situations should be subject to preliminary examination and should be noted clearly in the plan. The proposals should:</p> <ul style="list-style-type: none"> _ Include a statement of the issue being addressed without favouring a specified solution (if a specified solution is put forward, appropriate assessment will be required of that solution); _ State that issues may arise under Article 6(3) of the Habitats Directive that will require assessment and that alternative solutions may need to be considered to avoid significant effects; _ Stress that in deciding on a solution, it will be necessary to comply fully with Article 6(3) (and, if warranted, Article 6(4), including compensatory measures) of the Habitats Directive. <p>As has been raised with the Council, it is likely that certain projects supported by the plan will result in adverse effects on the integrity of a European site, and that future derogations under Article 6(4) will have to be pursued. These possible situations will require special attention and mitigation at plan level. In addressing the potential in combination effects of other plans and projects, existing strategies that will be given effect by the new plan will require review as part of the current appropriate assessment process, e.g. the Wind Energy Strategy. The NIR should conclude with a clear statement on whether or not there are risks of adverse effects on the integrity of a European site. In order to reach such conclusions, all recommendations of the NIR, including amendments and mitigation measures, must be reflected in the content of the plan itself.</p>	These comments will be taken into account by the AA.
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6.	<p>On a general point, it should be noted that appropriate assessment under Article 6(3) of the Habitats Directive is specifically intended to determine the likely significant effects on European sites in view of their conservation objectives, and to ensure that no plan or project that would have adverse effects on the integrity of a European site is approved or adopted (unless in exceptional circumstances where the requirements of Article 6(4) of the Habitats Directive can be met). Appropriate assessment does not deal with all significant ecological issues of relevance to proper planning and sustainable development, nor does it address all legal requirements in relation to the conservation and protection of ecological sites, habitats and species.</p>	This is noted.
7.	<p>The Biodiversity, Flora and Fauna section of the SEA should be undertaken by or in conjunction with a suitably qualified ecologist, and in conjunction with the NIR to ensure full integration of biodiversity issues and concerns, particularly in relation to nature conservation sites, rare and protected species, habitats that are rare or of high ecological value, and Article 10 of the Habitats Directive – see above. The EPA's <i>Integrated Biodiversity Impact Assessment</i> best practice guidance is of relevance in this regard.</p> <p>The Environmental Report is required to contain information on the environmental characteristics of the areas likely to be affected significantly by the plan. For biodiversity, flora and fauna, the scope of the SEA should include:</p> <ul style="list-style-type: none"> _ All nature conservation sites, including proposed and candidate sites _ Available information on habitats, including results of habitat surveys (including NPWS datasets on habitats/habitat complexes and conservation objective supporting data, and the Council's own surveys within the plan area), and habitat indicator mapping (available from Teagasc/EPA) _ Available information on rare and protected species and their habitats (including datasets on rare and protected species from NPWS and the National Biodiversity Data Centre) _ All watercourses, surface water bodies and associated wetlands, including floodplains and flood risk areas _ Other sites of high biodiversity value or ecological importance, e.g. BirdWatch Ireland's 'Important Bird Areas' (Crowe <i>et al.</i>, 20093) _ Local biodiversity areas, including those identified as a result of Heritage Plan or Biodiversity Plan actions or projects _ Ecological networks and corridors, and stepping stones <p>In general, no areas should be identified or targeted for development (e.g. through land use zoning or other strategies) without basic information on the ecological sensitivities of the lands in question, including a habitat map, i.e. the precautionary principle should apply and no areas should be committed to development in the absence of basic information on ecological constraints.</p> <p>The Environmental Report is required to contain environmental protection objectives. For biodiversity, flora and fauna, these should integrate with the objectives and obligations of other directives such as the Habitats and Birds Directives, the Water Framework Directive and the Floods Directive, and with the Wildlife Acts, 1976-2000, National Biodiversity Plan and the aims and objectives of the county's own Heritage Plan and Biodiversity Plan.</p> <p>Strategic environmental objectives should be included for all nature conservation sites (not just European sites), protected species and ecological corridors and stepping stones as outlined above.</p>	<p>The Biodiversity, Flora and Fauna section of the SEA will be informed by the findings of the AA. The cited issues will be considered through appropriate means e.g. baseline or mitigation etc. The EPA's <i>Integrated Biodiversity Impact Assessment</i> best practice guidance is of relevance in this regard.</p> <p>The EPA's <i>Integrated Biodiversity Impact Assessment</i> best practice guidance will be considered in the undertaking of the SEA.</p>

Table 3.2 Department of the Arts, Heritage and the Gaeltacht SEA Scoping Submission and Response

3.3 Submissions on the Draft Plan and SEA Environmental Report

A number of submissions that were made on the Draft Plan referred to and commented on the SEA Environmental Report which accompanied the Draft Plan on public display.

These submissions (including those from the Department for the Environment, Community and Local Government, the Western Regional Authority, the Department for Arts, Heritage and the Gaeltacht, the Department of Communications, Energy, and Natural Resources, An Taisce, EirGrid, the Environmental Protection Agency and the Office of Public Works) resulted in the following updates being made to the SEA Environmental Report:

1. To remove all references to the National Development Plan from the SEA Environmental Report and associated Non-Technical Summary.
2. To update the text (11 instances) in Table 10.1 of the SEA Environmental Report as follows:
Internal monitoring of **likely significant** environmental effects of grants of permission during the planning application stage (grant by grant)
3. To add the following text to Section 10.3 of the SEA Environmental Report:
The assumption is that the requirements contained within the grants of permissions are complied with.
4. To include the **National Monitoring Report for the Birds Directive** under Article 12 as a source of information under indicator B1.
5. To update the text in Section 4.7.3.5 of the SEA Environmental Report as follows:
In 2012~~3~~: **98** of the 12 monitored bathing waters achieved EU Guide and Mandatory values and were designated as being of Good Status; ~~23~~ (Céibh an Spidéal, **Trá na bhForbacha, Na Forbacha** and Trá na mBan, An Spidéal) only achieved the Mandatory values and were designated as Sufficient Status; and 1 (Clifden Beach) failed to achieve both Guide and Mandatory values and was designated as Poor Status (EPA, 201~~3~~4).
The Quality of Bathing Water in Ireland Report also identifies Traught - Kinvara as being a water exhibiting periodic pollution events which could influence their overall status.
6. To improve the description at Section 8.5 of the SEA Environmental Report including with reference to other Plans etc. which have been considered by the assessment of environmental effects (included in these are those identified at Sections 2.6, 4 and 5 of the SEA Environmental Report).
7. To update the footnote in SEA Environmental Report Section 4.9.1.3 as follows [and to also update Table 4.3 accordingly; note the overall findings of the EPA report with respect to compliance with standards have not changed]:
~~EPA (2012~~4~~) The Second Update Report on data presented in the EPA Report "Focus on Urban Waste Water Discharges in Ireland" Urban Waste Water Treatment in 2011~~ **Focus on Urban Waste Water Treatment in 2012**
8. To update the text in Section 2 by including additional descriptions of the relationship with the cited plans, programmes, strategy and review.

It is noted that updates including the following were made to the AA Natura Impact Report:

1. To remove all references to the National Development Plan from the Natura Impact Report.
2. To include a new appendix to the Natura Impact Report which presents in tabular form a matrix of potential impacts on the Natura 2000 network associated with the policies and objectives of the draft Plan. Measures incorporated into the Plan (as a series of policies and objectives) that mitigate these potential significant effects will also be presented.

3.4 Environmental Report

The SEA Environmental Report (which was informed by SEA Scoping Submissions) and the Draft Plan were placed on public display from 28 February 2014 to 9 May 2014. SEA recommendations were fully integrated into the Draft Plan.

Responses to submissions made on the Environmental Report during the period of public display were integrated into the Chief Executive's Report and circulated to Elected Members. Updates to the Environmental Report arising are detailed under Section 3.3.

The Environmental Report was also updated in order to take account of changes which were made to the original, Draft Plan that was placed on public display. Changes which were Material Alterations underwent SEA, the findings of which were placed on public display alongside the Material Alterations.

Members of the planning authority have taken into account the findings of all relevant SEA output during their consideration of the Draft Plan and before its adoption.

On making of the Plan, the original Environmental Report which had been placed on public display alongside the Draft Plan was updated to become a final Environmental Report which is consistent with the adopted Plan.

Section 4 Alternatives and the Plan

4.1 Introduction

One of the critical roles of the SEA was to facilitate an evaluation of the likely environmental consequences of a range of alternatives for the Plan.

Section 4.2 summarises 4 different alternative scenarios that were considered during the preparation of the Plan. Mapping is contained in the main SEA Environmental Report for some of the scenarios.

Section 4.3 provides a summary of the evaluation of environmental effects arising from each of the scenarios (the main Environmental Report contains the full evaluation).

The alternatives considered are constrained by the provisions of the RPGs;

- The RPG's population growth target 2016-2022 has been adjusted for the Plan period 2015-2021, meaning that a target of 13,160 persons has been allocated to the Council's administrative area for the plan period.
- The RPGs require that a minimum of 900 persons of the 2016-2022 allocation, or less than ten percent, is assigned to the town of Tuam; there is no alternative to this requirement.
- The RPGs require that the residual balance of c. 12,000 persons is distributed across the County, as deemed appropriate by the planning authority. The location of this residual balance is the basis for the alternatives.

4.2 Description of Alternative Scenarios

4.2.1 Scenario A

Concentrating growth in urban areas and settlements

Scenario A provides for a population target of 13,160 persons for the Plan period 2015-2021 and meets the minimum RPGs requirement for population allocation to the town of Tuam.

This scenario focuses on building strong urban centres and generating critical mass in the Galway Gateway, the Tuam Hub and a restricted number of towns to support enhanced infrastructure and services. These settlements would act as focal points for their rural catchments.

Development outside of these centres would be strictly controlled to retain the character of existing rural areas and a strong environmental protection policy would be implemented.

Growth is distributed across the County in line with the adopted Settlement Hierarchy, also having regard to the Regional Planning Guidelines. This scenario advocates and implements strong and robust environmental protection policies which are applied to various environmental zones within the County.

The majority of the coast and the Conamara Highlands are managed and planned as natural amenities subject to strict interpretation of EU Directives - with the exception of areas designated for natural resource enterprises such as forestry, wind energy and mineral extraction.

The east of the County supports rural enterprises - based on agri-business and service functions set in a matrix of strengthening villages and towns as well as some rural settlement in planned areas.

Rural areas of the County sustain recreation and tourism enterprises as well as environmental services. Quality of life is the priority in strong towns and villages. A separate and distinctive coastal complex sustains a mixture of marine enterprises, tourism, settlement, and culture and service facilities in an overwhelmingly natural context.

Rural Settlements would be planned in order to evolve into small mixed use urban centres, providing a range of services and employment to their local population.

4.2.2 Scenario B

Focussing growth predominantly into the Hub town of Tuam

Scenario B provides for a population target of 13,160 persons for the Plan period 2015-2021, the vast majority of which is assigned to the town of Tuam and its environs.

The Tuam and Environs area contains the vast majority of new settlement, infrastructure and enterprise at the expense of other towns and villages within the County which weaken and experience declines in population. As a result, the footprint of Tuam expands significantly.

Development outside of Tuam and Environs would be strictly controlled to retain the character of existing rural areas and a strong environmental protection policy would be implemented.

Rural areas that are not within an area influenced by the Tuam Hub weaken and rural populations decline.

The Plan limits physical development and economic growth in the County's east-west central economic corridor.

4.2.3 Scenario C

Promoting dispersed development throughout the County

Scenario C provides for a population target of 13,160 persons for the Plan period 2015-2021 and meets the minimum RPGs requirement for population allocation to the town of Tuam.

Apart from the required allocation to Tuam, the location and nature of development is completely dependent upon market demand and applications are evaluated on a case-by-case basis by the Council - with minimal consideration of planning or environmental protection - and favourable consideration is given to new development wherever it is applied for across the County.

The creation of critical mass in certain locations is not a consideration in this development strategy and, apart from the minimum RPGs requirement for population allocation to the town of Tuam, no specific targets for or limitations on growth are set in the settlement strategy.

The influence of Galway City and Tuam on growth within their commuter zones is strong and significant levels of suburbanisation develop along the roads in the vicinity of these settlements.

Low density greenfield ribbon development emanates from existing settlements along the road corridors thereby expanding the footprints of settlements. Extensive areas of weakly controlled rural housing occur:

- throughout the eastern half of the County around the towns of Tuam, Ballinasloe, Baile Chláir, Athenry, Portumna and Gort;
- in coastal areas stretching from the outer reaches of Galway City westwards to Conamara and on to, and beyond, Clifden;
- in certain areas of inland Conamara;

- between Galway City and Oughterard, Oughterard and Maam, and Maam and the environs of Cong adjacent to County Mayo.

Due to the highly dispersed nature of new settlement and the disproportionate occurrence of rural housing; villages and towns weaken. Limited brownfield development occurs in built up areas which are in need of regeneration. Instances of inappropriately scaled and designed development do occur however at certain locations within a number of the County's larger settlements.

In areas outside of the County's towns and villages, natural resource enterprises such as forestry, wind energy and mineral extraction are interspersed with large areas of rural housing.

Wind energy development occurs in the western half of the County and in the Slieve Aughty Mountains. There is no strategy as to how to accommodate this development within these areas.

4.2.4 Scenario D

Developing the Hub town of Tuam, supporting the Gateway and key towns while encouraging the development of other settlement centres and appropriate development in the rural areas

Scenario provides for a population target of 13,160 persons for the Plan period 2015-2021 and meets (and provides more than) the minimum RPGs requirement for population allocation to the town of Tuam.

This scenario follows a strong yet flexible approach to development, placing emphasis on:

- Supporting the Gateway of Galway City and the associated Galway Metropolitan Area;
- Focusing on fostering a critical mass in the Hub town (Tuam) to compliment the Gateway; and
- Promote the development of key towns and smaller villages along strategic development corridors (which focus on established and planned transportation infrastructure), thereby energising rural areas within the County.

Existing settlement strategy to be rationalised based on existing and proposed service infrastructure whilst providing a focus for the continued support of the rural areas.

Rural populations to be supported through this settlement strategy and through a sustainable, flexible approach to maintaining rural economy and population, balanced against responsible environmental protection.

Large areas of natural habitat remain in the West of the County interspersed with recreation and tourism enterprises adjoining extensive areas of natural resource enterprises such as forestry, renewable energy, fishing/marine, agriculture and mineral extraction.

The east-west central corridor of the County contains the majority of the settlement, infrastructure and enterprise.

4.3 Evaluation of Alternative Scenarios

The table below summarises the evaluation of environmental effects of the alternative scenarios that is provided in the SEA Environmental Report.

Table 4.1 Evaluation of Alternative Scenarios against SEOs

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated
Scenario A: Concentrating growth in urban areas and settlements	By limiting greenfield development and allowing densities to be maximised, this scenario would be likely to have beneficial effects upon: - the protection of biodiversity and flora and fauna, water resources, human health and the landscape; and - efforts to maximise sustainable transport, minimise flood risk and provide water services.	By providing for restrictive rural planning policies there is a likelihood that existing sustainable rural management practices would not be sustained and that there would be consequent effects upon certain habitats and species.	Potential adverse effects that would arise with regard to various environmental components (human health, biodiversity and flora and fauna, soil, water, flood risk, water services, waste, sustainable mobility, cultural heritage and the landscape) would be mitigated.
Scenario B: Focussing growth predominantly into the Hub town of Tuam	By limiting greenfield development in all areas apart from Tuam, this scenario would be likely to have beneficial effects upon: - the protection of biodiversity and flora and fauna, water resources, human health and the landscape; and - efforts to maximise sustainable transport, minimise flood risk and provide water services.	By providing for restrictive rural planning policies beyond the Tuam and Environs area there is a likelihood that existing sustainable rural management practices would not be sustained and that there would be consequent effects upon certain habitats and species.	Potential adverse effects that would arise with regard to various environmental components (soil, flood risk, waste, sustainable mobility, cultural heritage and the landscape) would be mitigated. Other potential adverse effects arising as a result of difficulties in providing waste water services (including those relating to human health, biodiversity and flora and fauna, water and water services) would be more difficult to mitigate. In order to mitigate these conflicts and prevent the occurrence of exceedances in the assimilative capacities of the River Nanny, River Clare and Lough Corrib, significant investment in waste water treatment infrastructure would be needed.
Scenario C: Promoting dispersed development throughout the County	By ensuring the continuation of human occupancy and use in rural areas, this scenario would allow for existing sustainable rural management practices (and associated habitats and species) to be sustained.	By allowing highly dispersed low density greenfield ribbon development and extensive areas of weakly controlled rural housing, this scenario would be likely to result in adverse effects upon: - the protection of biodiversity and flora and fauna, water resources, human health and the landscape; and - efforts to maximise sustainable transport, minimise flood risk and provide water services.	Potential adverse effects that would arise with regard to cultural heritage and waste would be mitigated.

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated
Scenario D: Developing the Hub town of Tuam, supporting the Gateway and key towns while encouraging the development of other settlement centres and appropriate development in the rural areas	By accommodating populations and development through the redevelopment of strategic urban areas this scenario would be likely to have beneficial effects upon: - the protection of biodiversity and flora and fauna, water resources, human health and the landscape; and - efforts to maximise sustainable transport, minimise flood risk and provide water services.		Potential adverse effects that would arise with regard to various environmental components (human health, biodiversity and flora and fauna, rural management practices, soil, water, flood risk, water services, waste, sustainable mobility, cultural heritage and the landscape landscape) would be mitigated.

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

The Alternative Scenario for the County Development Plan which has emerged from the Plan/SEA/AA/SFRA preparation process is Scenario D.

Scenario D was developed by the Planning Team, placed on public display by the Elected Members and adopted by the Elected Members having regard to both:

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

In summary the Plan represents a pragmatic recognition and continuation of established patterns and trends of development in County Galway. These have been modified to take account of the significant environmental sensitivities that exist over very large portions of the County with a view to stabilising both environmental conditions and the populations of those communities who continue to sustain these environments.

By complying with appropriate mitigation measures - including those which have been integrated into the Plan - potential adverse environmental effects which could arise as a result of implementing this scenario would be likely to be avoided, reduced or offset.

The Core Strategy Map from the Plan is reproduced on Figure 4.1 overleaf.

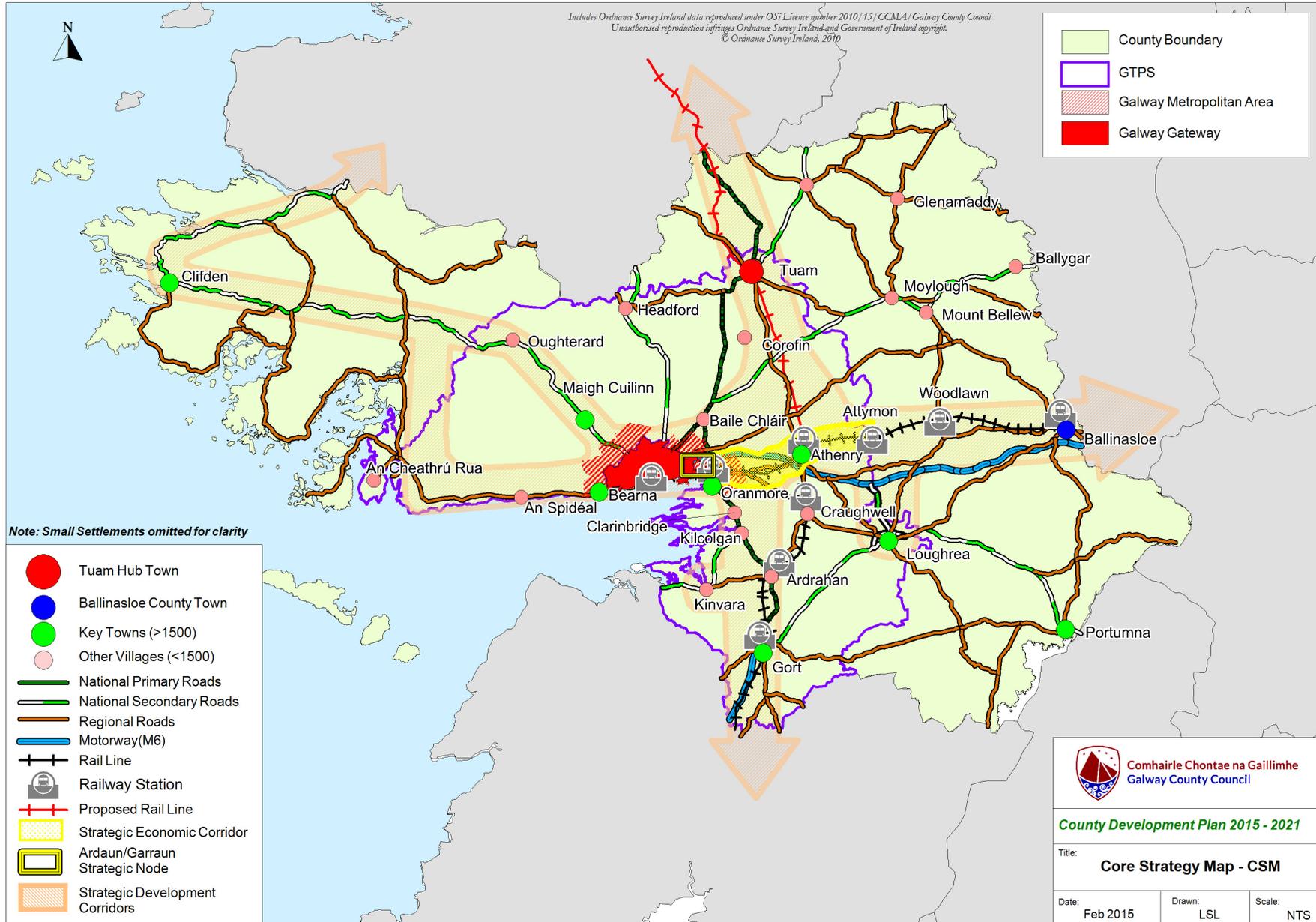


Figure 4.1 Core Strategy Map from the Plan

Source: Galway County Council (2015)

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 which 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 which allow quantitative measures of trends and progress over time relating to the Strategic Environmental Objectives identified in the SEA Environmental Report. Each indicator to be monitored is accompanied by the target(s) which were identified with regard to the relevant strategic actions.

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

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 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 likely significant environmental effects of Council grants of permission will provide monitoring of various indicators and targets on a *grant of permission by grant of permission*³

³ The likely significant effects of development proposals on environmental sensitivities are further

basis. Where significant adverse 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

A stand-alone Monitoring Report on the significant environmental effects of implementing the Plan will be prepared before in advance of the beginning of the review of the Plan. This report should address the indicators set out below. The Council is responsible for the ongoing review of indicators and targets, collating existing relevant monitored data, the preparation of monitoring evaluation report(s), the publication of these reports and, if necessary, the carrying out of corrective action.

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

determined during the development management process. By documenting this determination (e.g. whether a proposed development will impact upon a Protected Structure or whether a proposed development can be adequately served with water services) while granting permissions, or at a later date, the requirement to monitor the effects of implementing the Plan can be achieved. The assumption is that requirements contained within the grants of permissions are complied with.

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 ⁴	<ul style="list-style-type: none"> • Internal monitoring of environmental likely significant effects of grants of permission (grant by grant). • Department of Arts, 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	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	<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).
	B3ii: Number of significant impacts on the protection of species listed on Schedule 5 of the Wildlife Act 1976.	B3ii: No significant impacts on the protection of species listed on Schedule 5 of the Wildlife Act 1976	
	B4: Population of the County involved in land management	B4: Sustain the population of the County 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).

⁴ 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.

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 'good status' ⁵ by 2015 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 The 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).

⁵ 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 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 Arts, 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 Arts, 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 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	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	<ul style="list-style-type: none"> • Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).