SEA STATEMENT

FOR THE

GALWAY COUNTY DEVELOPMENT PLAN 2022-2028

for: Galway County Council

Áras an Chontae Prospect Hill Galway



by: CAAS Ltd.

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Section 1 Introduction

1.1 Introduction and Legislative Context

This is the Strategic Environmental Assessment (SEA) Statement for the Galway County Development Plan 2022-2028.

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 (not required for 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 changes to the original Draft Plan that were made on foot of submissions and recommendations in the submissions.

Galway County Council has 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:
- 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 Instances whereby Environmental Considerations were not integrated into the Plan

The Plan, considered as a whole, contributes towards environmental protection and management and sustainable development and complies with various legislative requirements. This is identified throughout the SEA documentation.

Various Plan provisions that would contribute towards the sustainable development of the County would, at the same time, have the potential to conflict with the environment, were mitigation measures not taken into account. This is normal and mitigation measures have been integrated into the Plan to deal with these potential effects.

However, a number of alterations were adopted by the Elected Members as part of the Plan that are particularly internally inconsistent with the overall approach provided for by the Plan, including those which are identified on Table 2.1 and were advised against by the Plan-preparation/SEA process. Also included on Table 2.1 is advice that was

provided by the SEA for consideration in advance of adoption of the Plan.

Table 2.1 Alterations Advised Against but Adopted			
Alteration Ref.	Commentary provided in advance of Plan Adoption	Recommendation provided in advance of Plan Adoption	
Volume 1 - 7.8 Volume 1 - 7.9 Volume 1 - 7.10 Volume 1 - 7.23 Volume 2 - 19.1	These alterations would not provide the most evidence-based framework for development and have the potential to undermine sustainable development and proper planning, including compact growth, by placing non-evidence-based restrictions on future growth. They do not align with higher level policy or guidance. These amendments have the potential to push development that would be appropriate in certain locations to more sensitive, less well-serviced, less well-connected locations.	Do not adopt as part of Draft Plan	
	Any potentially conflict between flood risk and the uses possible under the Open Space zoning provided under Amendment No. Volume 1 7.23 and Amendment No. Volume 2 19.1 would be mitigated by other Proposed Material Alterations to the text of Volume 2 that qualify what types of uses would be permissible.		
Volume 2 - 2.1	This alteration would potentially conflict proper flood risk management and not comply with the Flood Risk Management Guidelines. There would be potential risk to environmental components including human health and material assets.	Do not adopt as part of Draft Plan where non- compliance with the Flood Risk Management Guidelines has been advised. Where such proposals are being adopted it is	
		recommended that the proposal is modified in order to integrate the following requirement, with explicit notification provided on zoning maps: "Inappropriate Development on Flood Zones: Where a	
		"Inappropriate Development on Flood Zones: Where a development/land use is proposed within any area subject to this objective the development proposal will need to be accompanied by a detailed hydrological assessment and robust SUDS design which demonstrates the capacity to withstand potential flood events to maintain water quality and avoid potential effects to ecological features. • Any development proposals should be considered with caution and will be required to comply with The Planning System and Flood Risk Management Guidelines for Planning Authorities/Circular PL2/2014 & the associated Development Management Justification Test. • Climate Change should be duly considered in any development proposal. • Protect the riparian zones of watercourse systems throughout the plan area through a general 10 metre protection buffer from rivers within the plan area as measured from the near river bank, (this distance may be increased and decreased on a site by site basis, as appropriate). • Any development proposals submitted for this site will require a detailed ecological report (s), carried out by suitably qualified personnel for the purposes of informing Appropriate Assessment Screening by Galway County Council, the competent authority. • The relevant lands will be outlined and flagged with a symbol on the land use zoning map and on the GIS system of Galway County Council so that staff and the public are aware of the special conditions/constraints attached. • A briefing will be provided to relevant staff within Galway County Council on the special conditions and constraints on relevant lands."	
Volume 1 - 4.1 Volume 1 - 4.2 Volume 1 - 4.3 Volume 1 - 4.4	These alterations would dilute the management of rural housing (including in the Rural Metropolitan Area, Rural Area Under Strong Urban Pressure-GCTPS-Outside Rural Metropolitan Area Zone 1 and Rural Housing Zone 4 - Landscape Classification 2, 3 and 4) and have the potential to result in more housing in these areas with associated additional, unnecessary and potentially significant adverse effects on various environmental components, including landscape, biodiversity, surface and ground water, human health and sustainable mobility and climate emission reduction targets. This would present potential conflicts with legislative requirements including the European Habitats and Water Framework Directives that would be challenging to mitigate.	Do not adopt as part of Draft Plan	

Alteration Ref. Commentary provided in advance of Plan Adoption Recommendation provided in advance of Plan Adoption Volume 2 - 2 2 These alterations would not be consistent with established Do not adopt as part of Draft Plan Volume 2 - 3.1 population targets and/or the proper planning and sustainable Volume 2 - 3.5 development of the County. As a result they would present Where such proposals are being adopted and where Volume 2 - 6.4 additional, unnecessary and potentially significant adverse non-compliance with the Flood Risk Management Volume 2 - 6.5 effects on various environmental components, including soil, Guidelines has been advised it is recommended that the Volume 2 - 7.2 water, biodiversity, air and climatic factors and material proposal is modified in order to integrate the following Volume 2 - 7.3 assets. requirement, with explicit notification provided on Volume 2 - 7.4 zoning maps: Volume 2 - 7.8 For alterations relating to zoning, much of the zoning Volume 2 - 7.10 proposed is considered to be premature in the context of "Inappropriate Development on Flood Zones: Where a Volume 2 - 9.1 current population targets. development/land use is proposed within any area Volume 2 - 9.4 subject to this objective the development proposal will Volume 2 - 9.5 Potentially significant adverse unnecessary effects, would be need to be accompanied by a detailed hydrological Volume 2 - 9.6 likely to include: assessment and robust SUDS design which Volume 2 - 9.8 Effects on non-designated habitats and species demonstrates the capacity to withstand potential flood Volume 2 - 9.9 Loss of an extent of soil function arising from the events to maintain water quality and avoid potential Volume 2 - 10.2 replacement of semi-natural land covers with effects to ecological features. Volume 2 - 11.1 · Any development proposals should be considered with artificial surfaces Volume 2 - 12.2 Increased loadings on water bodies caution and will be required to comply with The Volume 2 - 15.1 Conflict with efforts to maximise sustainable Planning System and Flood Risk Management Volume 2 - 20.1 compact growth and sustainable mobility Guidelines for Planning Authorities/Circular PL2/2014 & Occurrence of adverse visual impacts the associated Development Management Justification Test. Where such alterations are further from the centre of · Climate Change should be duly considered in any settlements, potentially significant unnecessary adverse effects development proposal. · Protect the riparian zones of watercourse systems would be likely to include: Difficulty in providing adequate and appropriate throughout the plan area through a general 10 metre protection buffer from rivers within the plan area as waste water treatment as a result of zoning outside of established built development envelopes measured from the near river bank, (this distance may be increased and decreased on a site by site basis, as of settlements Adverse impacts upon the economic viability of appropriate). Any development proposals submitted for this site will providing for public assets and infrastructure Adverse impacts upon carbon emission reduction require a detailed ecological report (s), carried out by suitably qualified personnel for the purposes of targets in line with local, national and European environmental objectives informing Appropriate Assessment Screening by Galway County Council, the competent authority. Conflicts between transport emissions, including · The relevant lands will be outlined and flagged with a those from cars, and air quality symbol on the land use zoning map and on the GIS Conflicts between increased frequency of noise emissions and protection of sensitive receptors system of Galway County Council so that staff and the public are aware of the special conditions/constraints Potential effects on human health as a result of potential interactions with environmental vectors attached. · A briefing will be provided to relevant staff within Alteration Volume 2 - 3.5 would potentially conflict proper Galway County Council on the special conditions and flood risk management and not comply with the Flood Risk constraints on relevant lands." Management Guidelines. There would be potential risk to environmental components including human health and material assets. Note that in instances whereby a land use zoning objective for Open Space or Tourism or Community Infrastructure is being provided by an alteration to areas previously unzoned by the Draft Plan, potential effects would be mitigated by other Proposed Material Alterations to the text of Volume 2 that qualify what types of uses would be permissible. Proposed Material Alteration No. Volume 2 - 3.1 related to land use zoning and is immediately adjacent to the Cregganna Marsh SPA and has the potential, if unmitigated, to impact upon the integrity of this site. Proposed Material Alteration No. Volume 2 - 3.5 relate to land use zoning and intersect the Galway Bay Complex SAC and have the potential, if unmitigated, to impact upon the integrity of the SAC. Proposed Material Alteration No. Volume 2 - 9.4 relates to land use zoning and an access road to these lands intersects the

Lough Corrib SAC and has the potential, if unmitigated, to

impact upon the integrity of the SAC

2.3 Consultations

As environmental authorities identified under Planning and Development 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 environmental report could be made to Galway County Council¹: Department of Agriculture, Food and the Marine; Department of Culture, Heritage and the Gaeltacht; Department of Communications, Climate Action and Environment; Department of Housing, Planning and Local Government; Environmental Protection Agency; County Council; Roscommon County Council; Offaly County Council; Tipperary County Council; Clare County Council; and Galway City Council.

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/or the SEA Environmental Report while they were on public display (see Section 3).

2.4 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);
- Other Ecological Designations;
- 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;
 Cultural horitage (archaeological and
- Cultural heritage (archaeological and architectural) sensitivities; and
- Landscape Designations.

A number of these sensitivities are mapped on Figures 2.1 to 2.3.

Overlay mapping of environmental sensitivities was also prepared and a number of the environmental sensitivities described above were weighted and mapped overlapping each other. Figure 2.4 provides the overlay mapping of Environmental Sensitivities that was prepared. Environmental sensitivities are indicated by colours which range from higher to lower sensitivity.

2.5 Appropriate Assessment

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

The conclusion of the AA is that the Plan will not affect the integrity of the European Sites, alone or in combination with other plans or projects.²

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

2.6 Strategic Flood Risk Assessment

A Strategic Flood Risk Assessment (SFRA) has been undertaken alongside the Plan. The requirement for SFRA is provided under 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (Department of Environment and Office of Public Works, 2009) and associated Department of the Environment, Community and Local Government Circular PL2/2014. The recommendations from the SFRA have been integrated into the Draft Plan.

¹ The names of some of the relevant authorities have changed since notification was provided.

² Except as provided for in Article 6(4) of the Habitats Directive, viz. There must be: (a) no alternative solution available, (b) imperative reasons of overriding public interest for the plan to proceed; and (c) adequate compensatory measures in place.

2.7 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 within the Plan.

2.8 Integration of environmental considerations into Zoning of the Plan

Environmental considerations were integrated into the Plan's zoning through an interdisciplinary approach.

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

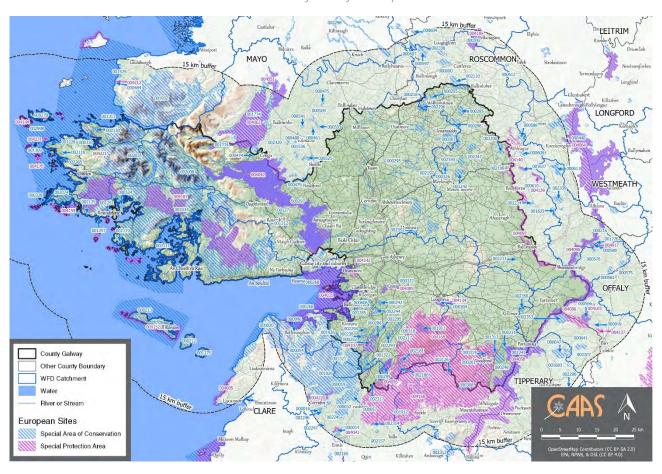
The detailed Plan preparation process undertaken by the Planning Department combined with specialist input from the SFRA process facilitated zoning that avoids inappropriate development being permitted in areas of high flood risk. Various provisions have been inserted into the Plan that provide for flood risk management at project level.

Also taken into account were environmental sensitivities relating to ecology, cultural heritage, landscape and water, as well as overlay mapping of environmental sensitivities.

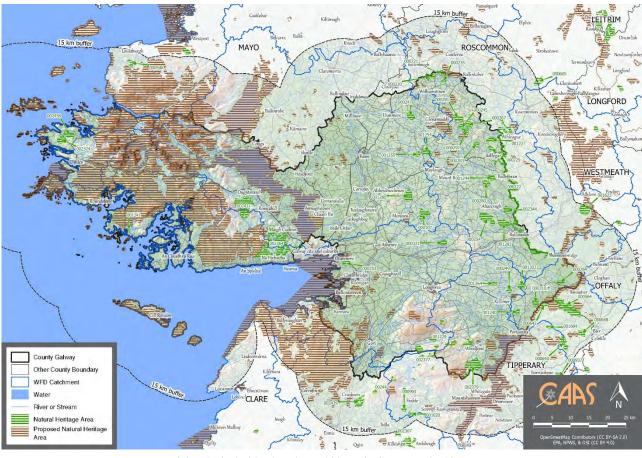
2.9 Integration of individual SEA, AA and SFRA provisions into the text of the Plan

Table 2.2 links key mitigation measure(s) - which have been integrated into the Plan - to the potential significant adverse 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.



European Sites within and adjacent to the Plan area



Other Ecological Designations within and adjacent to the Plan area

Figure 2.1 Selection of Individual Environmental Sensitivities taken into account (1 of 3)

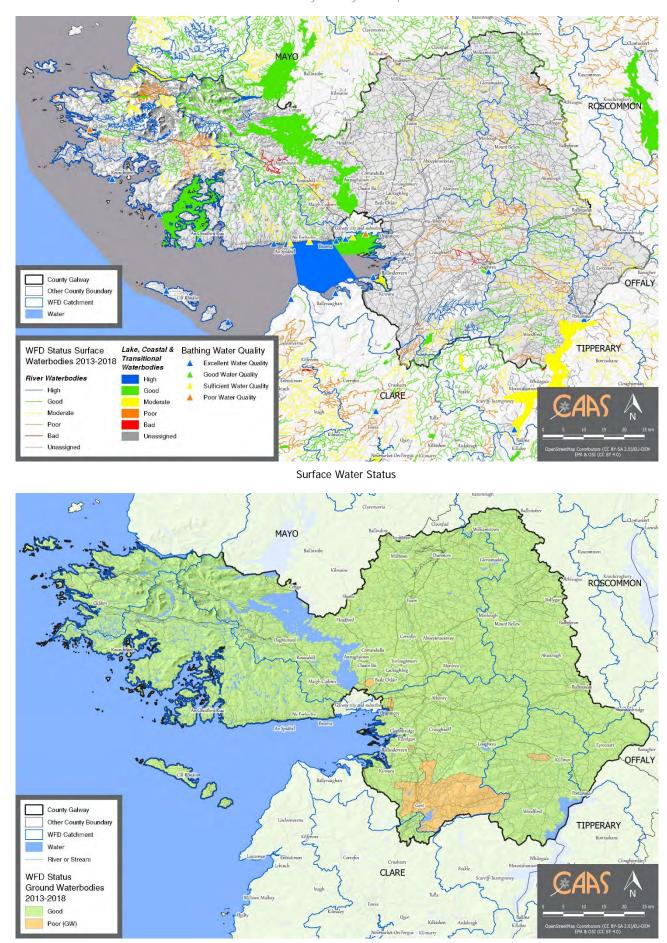
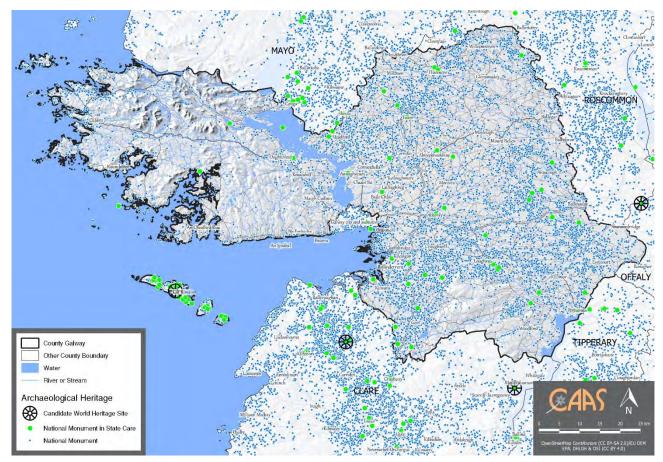


Figure 2.2 Selection of Individual Environmental Sensitivities taken into account (2 of 3)

Groundwater Status





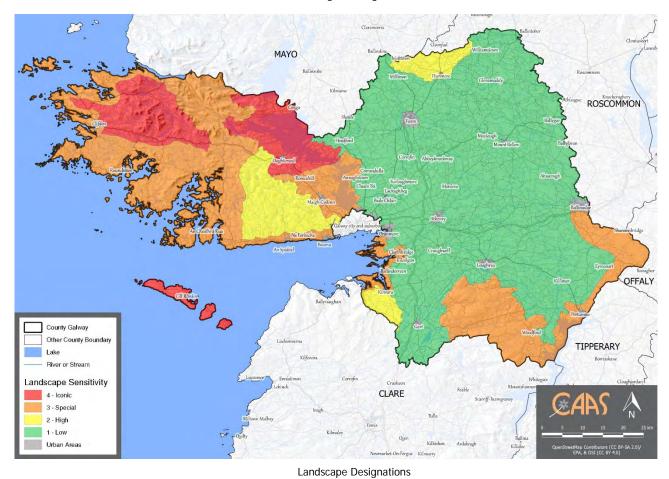


Figure 2.3 Selection of Individual Environmental Sensitivities taken into account (3 of 3)

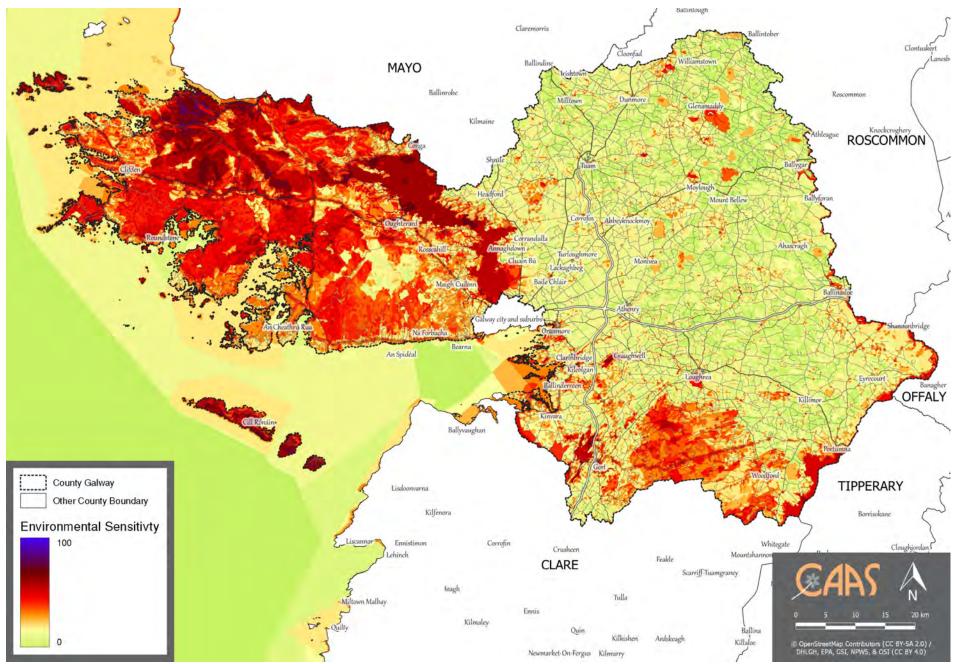


Figure 2.4 Overlay of Environmental Sensitivities

Table 2.2 Integration of Environmental Considerations

Topic	Potentially Significant Adverse Effect, if	Recommendations integrated into the Plan, included in:
Various – see below	Various – see below	MM1 Monitoring. The Council shall, in conjunction with the Regional Assembly and other sources as relevant, implement the monitoring programme as set out in the SEA Environmental Report and Statement. This will include the preparation of stand-alone SEA Monitoring Reports:
		1. To accompany the report required of the manager under section 15(2) of the Act, including information in relation to progress on, and the results of, monitoring the significant environmental effects of implementation of the Development Plan 2. On the significant environmental effects of implementing the Plan, in advance of the beginning of the review of the next Plan.
		PRP 2 Corridor and Route Selection Process. Policy objectives relating to new roads and other transport infrastructure projects that are not already provided for by existing plans/ programmes or are not already permitted, are subject to the undertaking of feasibility assessment, taking into account planning need, environmental sensitivities as identified in the SEA Environmental Report and the policy objectives of the Plan relating to sustainable mobility. Where feasibility is established, a Corridor and Route Selection Process will be undertaken where appropriate, for relevant new road infrastructure in two stages: Stage 1 – Route Corridor Identification, Evaluation and Selection.
		WM 5 Construction and Environmental Management Plans. Construction Environment Management Plans shall be prepared in advance of the construction of relevant projects and implemented throughout. Such plans shall incorporate relevant mitigation measures which have been integrated into the Plan and any lower tier Environmental Impact Statement or Appropriate Assessment. CEMPs typically provide details of intended construction practice for the proposed development, including: a) location of the sites and materials compound(s) including area(s) identified for the storage of construction refuse; b) location of areas for construction site offices and staff facilities;
		c) details of site security fencing and hoardings;
		d) details of on-site car parking facilities for site workers during the course of construction;
		e) details of the timing and routing of construction traffic to and from the construction site and associated directional signage; f) measures to obviate queuing of construction traffic on the adjoining road network;
		g) measures to prevent the spillage or deposit of clay, rubble or other debris;
		h) alternative arrangements to be put in place for pedestrians and vehicles in the case of the closure of any public right of way during the course of site development works;
		i) details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels;
		j) containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained (such bunds shall be roofed to exclude rainwater); k) disposal of construction/demolition waste and details of how it is proposed to manage excavated soil, including compliance with 2006 Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects, Department of the Environment, Heritage and Local Government;
		l) a water and sediment management plan, providing for means to ensure that surface water runoff is controlled such that no silt or other pollutants enter local water courses or drains.
		WM 6 Waste Management. To continue to meet the duties under the Waste Management (certification of historic unlicensed waste disposal and recovery activity) Regulations 2008, including those in relation to the identification and registration of closed landfills.
		WM7 Recycling Infrastructure. To provide for the provision of recycling infrastructure throughout the county where it is considered necessary and support the provision of additional recycling infrastructure throughout the county.
		WM 8 Sustainable Waste Management Practices. Promote and facilitate communities to become involved in environmental awareness activities and community based recycling initiatives or environmental management initiatives that will lead to local sustainable waste management practices. WM 9 Separate Collection of Waste. Encourage and support the provision of separate collection of waste in accordance with the requirements of the Waste Management (Food Waste) Regulations
		2009, the Waste Framework Directive Regulations, 2011 and other relevant legislation. MAS 1 Separate collection of waste in accordance with the requirements of the waste management (rood waste) regulations. MAS 1 Separation Distances from SEVESO Sites. To ensure that appropriate distances are maintained between any proposed development and any existing Seveso II establishment, in the interest of
		the health and safety of the occupiers of the proposed development.
		MAS 2 Soil Protection Measures. To require that, the siting of new establishments, or modification of existing establishments classified under the Seveso II Directive, and new development in the vicinity of existing establishments shall take into account the need to prevent major accidents involving hazardous substances and safeguard both the public and the environment. MAS 3 SEVESO III Sites. Take into account the provisions of the Major Accidents Directive, relating to the control of major accident hazards involving dangerous substances, and the recommendations
		of the Health and Safety Authority in the assessment of all planning applications located within the consultation distance of such sites. TI 4 Tourism and Infrastructure Capacity. The potential environmental effects of a likely increase in tourists/tourism-related traffic volumes in particular locations/along particular routes shall be
		considered and mitigated as appropriate. Such a consideration should include potential impacts on existing infrastructure (including drinking water, wastewater, waste and transport) resulting from tourism proposals. Galway County Council will support Irish Water and Failte Ireland to ensure that tourism is serviced by adequate and appropriate water services infrastructure. MCH 2 Marine Based Environment. It is a policy objective of the Local Authority to protect and enhance where appropriate marine biodiversity in accordance with proper planning and sustainable
		development. MCC 1 Environmental Values of the Coast. Protect the amenity, character, visual, recreational, economic potential and environmental values of the coast. Ensure that natural coastal defences
		including sand dunes, beaches and coastal wetlands are not compromised by inappropriate development. MCC 2 Protection of Coastal Habitats. To strictly control the nature and pattern of development within coastal areas and ensure that it is designed and landscaped to the highest standards and sited
		appropriately so as not to detract from the visual amenity of the area. (a) Development shall be prohibited where the development poses a significant or potential threat to coastal habitats or features, and/or where the development is likely to result in altered patterns of erosion or deposition elsewhere along the coast;
		(b) To prohibit development along the coast outside existing towns and villages where such development is not adequately safeguarded over the lifetime of the development without the need to construct additional coastal defences.

Topic	Potentially	Recommendations integrated into the Plan, included in:
. 56.5	Significant Adverse	
	Effect, if	
	Unmitigated	MCC 3 Protection of Coastal Area. It is a policy objective to protect the Coastal Area through the following measures:
		(a) Ensure that conservation works undertaken in coastal areas are in accordance with best practice and measures to protect the coastal habitats are supported;
		(b) Seek to prevent the unauthorised removal of sand and related beach material;
		(c) Protect, enhance and conserve beaches in the County from inappropriate development and seek to maintain the current status of the designated Blue Flag beaches and Green Coasts and to
		increase the number of beaches and coasts holding this status in the future;
		(d) Facilitate an Integrated Coastal Zone Management approach to ensure the conservation, management and protection of man-made and natural resources of the coastal zone;
		MCC 4 Integrated Framework Management Plan. Support the preparation of an Integrated Galway Bay Framework Management Plan by all relevant stakeholders to provide for the sustainable and integrated development of the Galway Bay Area in a co-ordinated manner
		GICT 3 Tourism Development within An Gaeltacht and Islands. (a) Encourage and facilitate the development of the tourism potential of the Gaeltacht and Islands in a manner that respects, builds
		on, protects and enhances the cultural, built and natural heritage and local amenities of the area;
		(b) Provide where feasible, and support the provision of tourism infrastructure and services including, walking, cycling and water-based infrastructure and short-term guest accommodation facilities
		throughout the Gaeltacht area in appropriate locations. Such infrastructure and services shall seek to manage any increase in visitor numbers in order to avoid significant effects including loss of
		habitat and disturbance and ensuring that any new projects, such as greenways, are developed at suitable locations. AD1 Sustainable Agriculture Practices. To facilitate the development of sustainable agricultural practices and facilities within the county, subject to complying with best practice guidance,
		normal planning and environmental criteria and the development management standards in Chapter 15 Development Management and Standards.
		AD3 Modernisation of Agriculture Buildings. To facilitate the modernisation of agriculture and to encourage best practice in the design and construction of new agricultural buildings and
		installations to protect the environment, natural and built heritage and residential amenity.
Biodiversity	Arising from both	Also refer to detailed measures for settlements contained in Volume 2 of the Plan.
and flora and fauna	construction and	LP 1 Lighting Schemes. To require that all developments shall ensure lighting schemes are designed so that excessive light spillage is minimised to ensure light pollution in the surrounding
and fauna	operation of development and	environment including residential amenity, wildlife and near public roads is limited. Such lighting schemes shall be submitted and agreed with the Planning Authority. LP 2 Lighting and Climate Action. To require the use of low energy LED (or equivalent) lighting in support of Climate Action.
	associated	LP 3 Dark Skies. To encourage the maintenance of dark skies in rural areas and to limit light pollution in urban and rural areas.
	infrastructure:	F2 Sustainable Development. To encourage the development of a well-managed sustainable forestry sector, which is compatible with the protection of the environment including the avoidance of
	 Loss of/damage to 	likely significant effects on European sites (SACs and SPAs) and is planted, managed and harvested in accordance with the Forest Service Guidelines for Landscape, Forest Harvesting and
	biodiversity in	Environmental, Archaeology, Biodiversity and Water Quality.
	designated sites (including European	F3 Native Woodlands. To ensure that existing native woodlands are protected and enhanced and, where appropriate, encourage the conversion of coniferous forest to native woodlands with a focus on opportunities for habitat linkage and wider eco-services.
	Sites and Wildlife	F4 Forestry Development. To encourage forestry and forestry related development, as a means of diversifying from traditional agriculture activity with a preference for native species.
	Sites) and Annexed	F5 Deforestation. To promote the avoidance of deforestation or commercial afforestation within European sites unless directly relating to the management of the site for its qualifying interests.
	habitats and species,	MEQ2 "Protection of the Environment. The Council shall require the following in relation to the management of authorised aggregate
	listed species,	extraction
	ecological connectivity and	(a) All quarries shall comply with the requirements of the EU Habitats Directive, the Planning and Development (Amendment) Act 2010 and by the guidance as contained within the DoEHLG Quarries and Ancillary Facilities Guidelines 2004, the EPA Guidelines 'Environmental Management in the Extractive Industry: Non Scheduled Minerals 2006 (including any updated/superseding documents) and
	non-designated	to DM Standard 21 of this Development Plan;
	habitats; and	(b) Require development proposals on or in the proximity of quarry sites, to carry out appropriate investigations into the nature and extent of old quarries (where applicable). Such proposals shall
	disturbance to	also investigate the nature and extent of soil and groundwater contamination and the risks associated with site development works together with appropriate mitigation;
	biodiversity and flora	(c) Require Development Proposals to assess the potential impact of extraction in areas where geo-morphological interest, groundwater and important aquifers, important archaeological features and
	and fauna; • Habitat loss,	Natural Heritage Areas are located; d) Have regard to the Landscape Character Assessment of the County and its recommendations;
	fragmentation and	(e) Ensure that any quarry activity has minimal adverse impact on the road network and that the full cost of road improvements, including during operations and at time of closure, which are
	deterioration,	necessary to facilitate those industries are borne by the industry itself.
	including patch size	(f) Ensure that the extraction of minerals or aggregates does not adversely impact on residential or environmental amenity;
	and edge effects;	(g) Protect all known un-worked deposits from development that might limit their scope for extraction."
	andDisturbance (e.g.	NHB 1 Natural Heritage and Biodiversity of Designated Sites, Habitats and Species. Protect and where possible enhance the natural heritage sites designated under EU Legislation and National Legislation (Habitats Directive, Birds Directive, European Communities (Birds and Natural Habitats) Regulations 2011 and Wildlife Acts) and extend to any additions or alterations to sites that may
	due to noise and	occur during the lifetime of this plan. Protect and, where possible, enhance the plant and animal species and their habitats that have been identified under European legislation (Habitats and Birds
1	lighting along	Directive) and protected under national Legislation (European Communities (Birds and Natural Habitats) Regulations 2011 (SI 477 of 2011), Wildlife Acts 1976-2010 and the Flora Protection Order (SI
1	transport corridors)	94 of 1999). Support the protection, conservation and enhancement of natural heritage and biodiversity, including the protection of the integrity of European sites, that form part of the Natura 2000
	and displacement of	network, the protection of Natural Heritage Areas, proposed Natural Heritage Areas, Ramsar Sites, Nature Reserves, Wild Fowl Sanctuaries (and other designated sites including any future
1	protected species	designations) and the promotion of the development of a green/ ecological network." NHR 2 European Sites and Appropriate Assessment. To implement Article 4 of the Habitate Directive and to ensure that Appropriate Assessment is carried out in relation to works, plans and projects.
	such as birds and bats.	NHB 2 European Sites and Appropriate Assessment. To implement Article 6 of the Habitats Directive and to ensure that Appropriate Assessment is carried out in relation to works, plans and projects likely to impact on European sites (SACs and SPAs), whether directly or indirectly or in combination with any other plan(s) or project(s). All assessments must be in compliance with the European
	2415.	Communities (Birds and Natural Habitats) Regulations 2011. All such projects and plans will also be required to comply with statutory Environmental Impact Assessment requirements where relevant.
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Topic Potentially Recommendations integrated into the Plan, included in:	
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Topic	Potentially Significant Adverse	Recommendations integrated into the Plan, included in:
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		TWHS 1 Trees, Hedgerows, Natural Boundaries and Stone Walls Protect and seek to retain important trees, tree clusters and tree boundaries, ancient woodland, natural boundaries including stonewalls, existing hedgerows particularly species rich roadside and
		townland boundary hedgerows, where possible and replace with a boundary type similar to the existing boundary. Ensure that new development proposals take cognisance of significant trees/tree
		stands and that all planting schemes developed are suitable for the specific site and use suitable native variety of trees of Irish provenance and hedgerows of native species. Seek Tree Management
		Plans to ensure that trees are adequately protected during development and incorporated into the design of new developments.
		TWHS 2 Planting of Trees and Woodlands
		Encourage and promote in co-operation with Coillte and the Department of Agriculture, Food and the Marine and other organisations, the planting of trees and woodlands, as an important means of contributing to its objective of sustaining, protecting and enhancing the County's biodiversity, natural resources, amenity, landscape and developing tourism product. Encourage community woodlands
		in urban/urban fringe areas utilising funding available through schemes such as the NeighbourWood and Native Woodland Schemes.
		TWHS 3 Protection of Forestry
		Protect all substantial areas of deciduous forest, other than areas of commercial forestry. Proposals for development in these areas should seek to interact with the landscape character of the forested
		areas and its limits while also enhancing the forested areas so as to increase biodiversity value. BMSP 8 Jetty/Marina Development.
		Support the preparation of a feasibility study for a jetty/marina development in the vicinity of Bearna Pier and any necessary marine/foreshore works to facilitate public access to and use of the area
		around the pier, such as breakwaters. This feasibility study shall take account of the requirements to comply with the European Habitats Directive
		CT 2 Water Sports
		To encourage the development of coastal tourism in areas such as water-sports and water-related activities and events subject to normal planning and environmental criteria CT3 Tourism Development
		To support proposals for tourism development in coastal areas where it can be demonstrated that there will be no negative impacts on the amenities of the area, the integrity of the natural
		environment or the economic value of the County's coastline and beaches.
		CT 4 Blue Flags To continue to work with An Taiges, the least community and other relevant stakeholders to retain and increase the number of Plus Flag quards in the County.
		To continue to work with An Taisce, the local community and other relevant stakeholders to retain and increase the number of Blue Flag awards in the County. CT 5 Tourism Products
		To support the protection and enhancement of our islands, coastline and waterways as tourism products and attractions, subject to community and environmental carrying capacity.
		HT 3 Sustainable Tourism Industry
		To support the development of a more sustainable tourism industry which minimises adverse impacts on local communities, the built heritage, landscapes, habitats and species; leaving them undiminished as a resource for future generations, while supporting social and economic prosperity.
		GICT 3 Tourism Development within An Ghaeltacht and Islands
		(a) Encourage and facilitate the development of the tourism potential of the Gaeltacht and Islands in a manner that respects, builds on, protects and enhances the cultural, built and natural heritage
		and local amenities of the area; (b) Provide where feasible and support the provision of tourism infrastructure and services including, walking, cycling and water-based infrastructure and short-term guest accommodation facilities
		throughout the Gaeltacht area in appropriate locations. Such infrastructure and services shall seek to manage any increase in visitor numbers in order to avoid significant effects including loss of
		habitat and disturbance and ensuring that any new projects, such as greenways are developed at suitable locations.
		RE4 Solar Energy Developments.
		Promote and facilitate solar farm developments in suitable locations, having regard to areas of the County designated for this purpose in the Local Authority Renewable Energy Strategy. The Planning Authority will assess any planning application proposals for solar energy production having due regard to the Habitats Directive and to the detailed policy objectives and Development Standards set
		out in the Local Authority Renewable Energy Strategy.
Population	Potential adverse	Also refer to measures under other environmental components including Soil, Water and Air and Climatic Factors.
and human	effects arising from	AQ 1 Ambient Air Quality
health	flood events.	To promote the preservation of best ambient air quality compatible with sustainable development in accordance with the EU Ambient Air Quality and Cleaner Air for Europe (CAFÉ) Directive (2008/50/EC) and ensure that all air emissions associated with new developments are within Environmental Quality Standards as set out in the Air Quality Standards Regulations 2011 (SI No. 180 of
	 Potential interactions if effects arising 	(2008/50/EC) and ensure that all air emissions associated with new developments are within Environmental Quality Standards as set out in the Air Quality Standards Regulations 2011 (SI No. 180 of 2011) (or any updated/superseding documents).
	from environmental	AQ 2 Assessment of Air Quality
	vectors.	To require developments which would have the potential to have adverse impacts on air quality to carry out assessments of the impact of the development on air quality.
		AQ 3 Air Quality Mitigation Measures To somitise the use of appropriate mitigation measures such as dust demonstrate minimize the netential impacts of developments on six quality.
		To require the use of appropriate mitigation measures such as dust dampeners to minimise the potential impacts of developments on air quality. AQ 4 Air Purification
		Galway County Council shall encourage landscaping and deciduous tree planting in an environmentally sensitive manner within towns and villages as a means of air purification, the filtering of
		suspended particles and the improvement of their micro-climate.
		AQ 5 Radon Calway County Council shall have regard, to the specific guidance on radon provention measures for new homes as contained within the existing Ruilding Regulations (including any
		Galway County Council shall have regard, to the specific guidance on radon prevention measures for new homes as contained within the existing Building Regulations (including any updated/superseding Regulations that may be published within the lifetime of this Development Plan).
		NP 1 Galway County Council Noise Action Plan 2019-2023

Topic	Potentially Significant Adverse	Recommendations integrated into the Plan, included in:
	Effect, if Unmitigated	
	Unmitigated	To implement the Galway County Council Noise Action Plan 2019-2023 (and any subsequent Plan) in order to avoid, prevent and reduce the harmful effects, including annoyance, due to environmental noise exposure. NP 2 Developments within Noise Maps (Noise Action Plan 2019-2023) To require that where new developments are proposed within the noise limits of the noise maps for the designated sections of roads in the County, appropriate mitigation measures are undertaken so as to prevent harmful effects from environmental noise. NP3 Noise Impact Assessments To require an assessment of impact of the development on noise levels, having regard to the provisions of the Environmental Protection Agency Acts 1992 and 2003 and the EPA Noise Regulations 1994 when assessing planning application. NP 4 Noise Pollution and Regulation Restrict development proposals causing noise pollution in excess of best practice standards and regulate and control activities likely to give rise to excessive noise, other than those activities which are regulated by the EPA NP5 Noise Mitigation Measures Require activities likely to give rise to excessive noise to install noise mitigation measures and monitors. The provision of a noise audit may be required where appropriate. SO 3 Soil Protection, Contamination and Remediation Adequate and appropriate investigations shall be carried out into the nature and extent of any soil and groundwater contamination and the risks associated with site development work, where brownfield development is proposed. All undeveloped, contaminated sites shall be remediated to internationally accepted standards prior to redevelopment. All applications shall be accompanied by a report from a qualified, expert consultant remediation incorporating international best practice and expertise on innovative ecological restoration techniques including specialist planting and green initiatives that create aesthetically improved sites, healthy environments and contribute to the provision of new green open spaces as integr
		proposed development. MAS 2 Soil Protection Measures To require that, the siting of new establishments, or modification of existing establishments classified under the Seveso II Directive, and new development in the vicinity of existing establishments shall take into account the need to prevent major accidents involving hazardous substances and safeguard both the public and the environment. MAS 3 SEVESO III Sites Take into account the provisions of the Major Accidents Directive, relating to the control of major accident hazards involving dangerous substances, and the recommendations of the Health and Safety
Soil	Potential adverse effects on the hydrogeological and ecological function of the soil resource, including as a result of development on contaminated lands. Potential for riverbank and coastal erosion.	Also refer to measures under other environmental components including Water. SO 1 Soil Impact Assessments Ensure good soil quality throughout the county by requiring developments of a certain nature (as specified in the relevant environmental legislation) to carry out assessments of the impact of the development on soil quality. SO 2 Soil Protection Measures To ensure that adequate soil protection measures are undertaken where appropriate. SO 3 Soil Protection, Contamination and Remediation Adequate and appropriate investigations shall be carried out into the nature and extent of any soil and groundwater contamination and the risks associated with site development work, where brownfield development is proposed. All undeveloped, contaminated sites shall be remediated to internationally accepted standards prior to redevelopment. All applications shall be accompanied by a report from a qualified, expert consultant remediation incorporating international best practice and expertise on innovative ecological restoration techniques including specialist planting and green initiatives that create aesthetically improved sites, healthy environments and contribute to the provision of new green open spaces as integral parts of newly created areas. Treatment/management of any contaminated material shall comply as appropriate with the Waste Management Act place, waste facility permity, as amended, and under the EPA Act 1992 (Industrial Emissions licensing, in particular the First Schedule, Class 11 Waste), as amended. These measures will ensure that contaminated material will be managed in a manner that removes any risk to human health and ensures that the end use will be compatible with any risk. PG 1 Geological and Geo-Morphological Systems Protect and conserve geological and geo-morphological systems, county geological heritage sites and features from inappropriate development that would detract from their heritage value and interpretation and ensure that any plan or project affecting karst formations, eskers or ot

Topic	Potentially Significant Adverse	Recommendations integrated into the Plan, included in:
	Effect, if Unmitigated	
	Unmitigated	Encourage greater awareness of the geological heritage sites of the county and promote, where appropriate, public access to geological and geomorphological sites and avoid inappropriate development.
		ESK 1 Protection of Eskers Systems
		Protect and conserve the landscape, natural heritage and biodiversity value of esker systems in the county. Assess applications for quarrying and other proposed developments with reference to their status or relative importance, for example, amenity, landscape and scientific value in the context of the overall esker system. ESK 2 Esker Areas
		Have regard to the Landscape Character Assessment of the County of Galway and its recommendations relating to the Esker areas and any other subsequent relevant reports/ data. UGG 1 UNESCO Global Geopark Status.
		To continue to work in partnership with all relevant stakeholders to facilitate and support the ongoing work of the Joyce Country and Western Lakes aspiring Geopark and its application for full UNESCO Global Geopark status. Support initiatives in relation to the Burren Lowlands, The Burren and Cliffs of Moher UNESCO Global Geopark that relate to the county.
Water	 Potential adverse effects upon the 	Also refer to measures under other environmental components including Soil and Material Assets. RH 11 Waste Water Treatment provision.
	status of water bodies and entries to	Provide for sustainable rural housing in the county in accordance with the EPA Code of Practice: Wastewater Treatment Systems for Single Houses (2009). AD4 Agriculture Waste.
	the WFD Register of Protected Areas	To ensure agricultural waste is managed and disposed of in a safe, efficient and sustainable manner having regard to the environment and in full compliance with the European Communities Good Agricultural Practice for the Protection of Waters Regulations (2014) and relevant best practice guidelines.
	(ecological and human value),	Liaise with Irish Water, to maximise the potential of existing capacity and to facilitate the timely delivery of new water services infrastructure, to facilitate existing and future growth.
	arising from changes in quality, flow	WS 2 Protection of Water Supplies Collaborate with Irish Water and the Group Water Federation Scheme to protect, conserve and enhance all existing and potential water resources in the County to ensure compliance with the
	and/or morphology.Increase in flood risk	European Union (Drinking Water) Regulations 2014 (as amended) and compliance of water supplies with the parameters identified in these Regulations. WS 3 River Basin Management Plan for Ireland 2018-2021
	and associated effects associated	Support the implementation of the relevant recommendations and measures as outlined in the relevant River Basin Management Plan 2018-2021, and associated Programme of Measures, or any such plan that may supersede same during the lifetime of this plan.
	with flood events.	WS 4 Requirement to Liaise with Irish Water – Water Supply Ensure that new developments are adequately serviced with a suitable quantity and quality of drinking water supply and require that all new developments intending to connect to a public water
		supply liaise with Irish Water with regard to the water (and wastewater) infrastructure required. WS 5 Private Water Supply
		Support the provision of a private water supply in instances where there is no public water supply
		or where the existing supply does not have sufficient capacity to serve the proposed development. This will only be considered where it can be demonstrated that the proposed water supply meets the standards set out in the EU and national legislation and guidance including adherence to Article 6 of the EU Habitats Directive, and would not be prejudicial to public health or would not significantly impact negatively on the source or yield of an existing supply." WS 6 Water Framework Directive
		ws 6 water Framework Directive Support the preparation of Drinking Water Safety Plans and Source Protection Plans to protect sources of public water supply, in accordance with the requirements of the Water Framework Directive. WS 7 Water Quality
		Require that new development proposals would ensure that there would not be an unacceptable impact on water quality and quantity including surface water, ground water, designated source protection areas, river corridors and associated wetlands.
		WS 8 Proliferation of Septic Tanks Encourage the use of high standard treatment plants to minimise the risk of groundwater pollution.
		CWS 1 Water Conservation with all Developments
		To ensure all developments incorporate water conservation measures such as rainwater harvesting to minimise wastage of water supply. CWS 2 Water Mains Rehabilitation
		To assist Irish Water in their commitment to water conservation and support efforts to tackle leakage through find and fix (active leakage control) and water mains rehabilitation. CWS 3 Promotion of Water Conservation
		To support Irish Water in promoting public awareness and involvement in water conservation measures by households, business and industry.
		WW 1 Enhancement of Wastewater Supply Infrastructure Work in conjunction with Irish Water to maximise the potential of existing capacity and to facilitate the delivery of new wastewater services infrastructure, to facilitate future growth in the county.
		The Ballinasloe area will not be suitable or considered appropriate siting for a regional Connaught/Ulster waste management facility and/or as a regional or County sludge hub given its proximity to Environmentally sensitive sites including Natura 2000, SPC, SACs under Habitat, Birds and Wildlife Directives, proximity to River Suck and Shannon, floodplain and groundwater risks/conflicts,
		unsatisfactory water status with regard to Water framework obligations and River Basin Management plans, interference with progressive sustainable development plans with regard to National Cycleway Spur, Suck Bathing and emerging Water recreation feasibility plans, and in keeping with Environmental Justice Principles of affording the population and environment of Ballinasloe the
		opportunity to evolve, flourish and regenerate after repeated chronic siting of waste facilities in the area in order to guarantee that those living in Ballinasloe have equal access to a healthy, safe, and sustainable environment, as well as equal protection from environmental harm.

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	<u> </u>	The Tuam Area will not be suitable or considered appropriate siting for a regional Connaught/Ulster waste management facility and/or as a regional or County sludge hub given its proximity to the
		SAC Lough Corrib and River Clare flood plain and the processing or associated treatment will not be permitted in the lifetime of the plan. " WW 2 Delivery of Wastewater Infrastructure
		Liaise and co-operate with Irish Water in the implementation and delivery of the Water Services Strategic Plan (2015) and the Irish Water Investment Plan 2020-2024 and other relevant investment
		works programmes of Irish Water in the delivery of infrastructure within the county.
		The Ballinasloe area will not be suitable or considered appropriate siting for a regional Connaught/Ulster waste management facility and/or as a regional or County sludge hub given its proximity to Environmentally sensitive sites including Nature 2000, SPC, SACs under Habitat, Birds and Wildlife Directives, proximity to River Suck and Shannon, floodplain and groundwater risk/conflicts,
		unsatisfactory water status with regard to Water framework obligations and River Basin Management plans, interference with progressive sustainable development plans with regard to National Civelence State Basing and emerging Water regression feesibility plans, and in keeping with Environmental Justice Principles of affecting the population and environment of Pallingsion the
		Cycleway Spur, Suck Bathing and emerging Water recreation feasibility plans, and in keeping with Environmental Justice Principles of affording the population and environment of Ballinasloe the opportunity to evolve, flourish and regenerate after repeated chronic siting of waste facilities in the area in order to guarantee that those living in Ballinasloe have equal access to a healthy, safe and
		sustainable environment, as well as equal protection from environmental harm.
		The Tuam Area will not be suitable or considered appropriate siting for a regional Connaught/Ulster waste management facility and/or as a regional or County sludge hub given its proximity to the SAC Lough Corrib and River Clare flood plain and the processing or associated treatment will not be permitted in the lifetime of this plan. "
		WW 3 The Greater Galway Area Strategic Drainage Study
		To seek to accelerate and support the delivery of the Greater Galway Area Strategic Drainage Study and the associated solutions as identified in the RSES as an essential infrastructure requirement in conjunction with the Department of the Environment, Climate and Communications, Irish Water and Galway City Council.
		WW 4 Requirement to Liaise with Irish Water – Wastewater Ensure that new developments will only be permitted which are adequately serviced with sufficient
		capacity for appropriate collection, treatment and disposal (in compliance with the Water Framework Directive and River Basin Management Plan) to the public sewer unless provided for otherwise by
		the plan. Developers shall liaise with Irish Water with regard to the wastewater (and water) infrastructure to ensure sufficient capacity is available prior to the submission of a planning application. " WW 5 Serviced Sites
		Support the servicing of small towns and villages including initiatives to provide an alternative to one-off housing in the countryside, in accordance with the National Planning Framework. WW 6 Private Wastewater Treatment Plants
		Ensure that private wastewater treatment plants, where permitted, are operated in compliance with Environmental Protection Agency (EPA) Code of Practice for Domestic Waste Water Treatment System 2021 (Population Equivalent <10).
		WW 7 Sustainable Drainage Systems To require the use of Sustainable Drainage Systems to minimise and limit the extent of hard surfacing and paving and require the use of SuDS measures be incorporated in all new development
		(including extensions to existing developments). All development proposals shall be accompanied by a comprehensive SuDS assessment including run-off quantity, run off quality and impacts on habitat and water quality.
		WW 8 Storm Water Infrastructure To support the improvement of storm water infrastructure and to increase the use of sustainable drainage and reduce the risk of flooding in urban environments.
		AF 1 Marine Aquaculture To support the sustainable development of marine aquaculture and fishing industries, so as to maximise their contribution to jobs and growth in coastal communities where it can be demonstrated
		that the development will not have significant adverse effects on the environment. SF 1 Shellfish Waters Directive
		To continue to work with local communities, relevant stakeholders and with the Department of Agriculture, Food and Marine to ensure the proper and successful implementation of the Shellfish Waters Directive along County Galway's coastline.
		SF 2 Protection of Shellfish Waters
		To seek to protect the quality of designated shellfish waters off the County Galway coast. WR 1 Water Resources
		Protect the water resources in the plan area, including rivers, streams, lakes, wetlands, springs, turloughs, surface water and groundwater quality, as well as surface waters, aquatic and wetland
		habitats and freshwater and water dependant species in accordance with the requirements and guidance in the EU Water Framework Directive 2000 (2000/60/EC), the European Union (Water Policy)
		Regulations 2003 (as amended), the River Basin District Management Plan 2018 – 2021 and other relevant EU Directives, including associated national legislation and policy guidance (including any superseding versions of same) and also have regard to the Freshwater Pearl Mussel Sub-Basin Management Plans. WR 2 River Basin Management Plans
		It is a policy objective of the Planning Authority to implement the programme of measures developed by the River Basin District Projects under the Water Framework Directive in relation to: Surface
		and groundwater interaction, Dangerous substances, Hydro-morphology, Forestry, On site wastewater treatment systems, Municipal and industrial discharges, Urban pressures, Abstractions. WTWF 1 Wetland Sites
		Protect and conserve the ecological and biodiversity heritage of the wetland sites in the County. Ensure that an appropriate level of assessment is completed in relation to wetland habitats that are
		subject to proposals which would involve drainage or reclamation that might destroy, fragment or degrade any wetland in the county. This includes lakes and ponds, turloughs, watercourses, springs and swamps, marshes, fens, heath, peatlands, some woodlands as well as some coastal and marine habitats. Protect Ramsar sites under The Convention on Wetlands of International Importance
		(especially as Waterfowl Habitat). IW 1 Inland Waterways
		(a) Protect and conserve the quality, character and features of inland waterways by controlling developments close to navigable and non-navigable waterways in accordance with best practice
		guidelines.

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		(b) Preserve, protect and enhance Galway's inland lakes and waterways for their amenity and recreational resource amenity.
		(c) Protect the riparian zones of watercourse systems throughout the County, recognising the benefits they provide in relation to flood risk management and their protection of the ecological integrity
		of watercourse systems and ensure they are considered in the land use zoning in Local Area Plans. (d) The Planning Authority will support in principle the development and upgrading of the Inland Waterways and their associated facilities in accordance with legislation, best practice and relevant
		management strategies, key stakeholders and bodies including Waterways Ireland.
		(e) Ensure all abstractions of water will be subject to assessment for compliance with the requirements of Article 6 of the Habitats Directive.
		(f) Seek to provide additional accesses to lake shores and rivers for public rights of way, parking and layby facilities, where appropriate.
		(g) Developments shall ensure that adequate soil protection measures are undertaken, where appropriate, including investigations into the nature and extent of any soil/groundwater contamination. FL 1 Flood Risk Management Guidelines
		It is the policy objective of Galway Council to support, in co-operation with the OPW, the implementation of the EU Flood Risk Directive (2007/60/EC), the Flood Risk Regulations (SI No. 122
		of 2010) and the DEHLG/OPW publication The Planning System and Flood Risk Management Guidelines (2009) (and any updated/superseding legislation or policy guidance) and Department Circular
		PL2/2014 or any updated / superseding version.
		FL 2 Flood Risk Management and Assessment Comply with the requirements of the DoEHLG/OPW The Planning System and Flood Risk Management Guidelines for Planning Authorities and its accompanying Technical Appendices Document 2009
		(including any updated/superseding documents).
		This will include the following:
		(a) Avoid, reduce and/or mitigate, as appropriate in accordance with the Guidelines;
		(b) Development proposals in areas where there is an identified or potential risk of flooding or that could give rise to a risk of flooding elsewhere will be required to carry out a Site-Specific Flood Risk
		Assessment, and justification test where appropriate, in accordance with the provisions of The Planning System and Flood Risk Management Guidelines 2009 (or any superseding document); Any flood risk assessment should include an assessment of the potential impacts of climate change, such as an increase in the extent or probability of flooding, and any associated measures necessary to
		address these impacts;
		(c) Development that would be subject to an inappropriate risk of flooding or that would cause or exacerbate such a risk at other locations shall not normally be permitted;
		(d) Galway County Council shall work with other bodies and organisations, as appropriate, to help protect critical infrastructure, including water and wastewater, within the County, from risk of
		flooding. FL 3 Principles of the Flood Risk Management Guidelines
		The Planning Authority shall implement the key principles of flood risk management set out in the Flood Risk Management Guidelines as follows:
		(a) Avoid development that will be at risk of flooding or that will increase the flooding risk elsewhere, where possible;
		(b) Substitute less vulnerable uses, where avoidance is not possible; and
		(c) Mitigate and manage the risk, where avoidance and substitution are not possible. Development should only be permitted in areas at risk of flooding when there are no alternative, reasonable sites available in areas at lower risk that also meet the objectives of proper planning and
		sustainable development. Vulnerable development in areas which have the highest flood risk should be avoided and/or only considered in exceptional circumstances (through a prescribed Justification
		Test) if adequate land or sites are not available in areas which have lower flood risk
		FL 4 Flood Relief Schemes
		The Planning Authority shall support and co-operate with the Office of Public Works (OPW) in the delivery of Flood Relief Schemes. FL 5 Catchment Planning
		The Planning Authority will support the OPW'S CFRAM Programme and catchment-based Flood Planning Groups, especially where catchments go beyond the Council's administrative boundary, in the
		development and implementation of catchment-based strategies for the management of flood risk - including those relating to storage and conveyance.
		FL 6 Surface Water Drainage and Sustainable Drainage Systems (SuDs)
		Maintain and enhance, as appropriate, the existing surface water drainage system in the County. Ensure that new developments are adequately serviced with surface water drainage infrastructure
		and promote the use of Sustainable Drainage Systems in all new developments. Surface water run-off from development sites will be limited to pre-development levels and planning applications for new developments will be required to provide details of surface water drainage and sustainable drainage systems proposals.
		FL 7 Protection of Waterbodies and Watercourses
		Protect waterbodies and watercourses within the County from inappropriate development, including rivers, streams, associated undeveloped riparian strips, wetlands and natural floodplains. This will
		include protection buffers in riverine, wetland and coastal areas as appropriate.
		FL 8 Flood Risk Assessment for Planning Applications and CFRAMS Protect Flood Zone A and Flood Zone B from inappropriate development and direct developments/land uses into the appropriate Flood Zone in accordance with The Planning System and Flood Risk
		Management Guidelines for Planning Authorities 2009 (or any superseding document) and the guidance contained in Development Management Standard 69. Site-specific Flood Risk Assessment
		(FRA) is required for all planning applications in areas at elevated risk of flooding, even for developments appropriate to the particular flood zone. The detail of these site-specific FRAs will depend on
		the level of risk and scale of development. A detailed site-specific FRA should quantify the risks, the effects of selected mitigation and the management of any residual risks. The Planning Authority
		shall have regard to the results of any CFRAM Studies in the assessment of planning applications. Development proposal will need to be accompanied by a Development Management Justification Test in addition to the site-specific Flood Risk Assessment. Where only a small proportion of a site is at risk of flooding, the sequential approach shall be applied in site planning, in order to seek to
		ensure that no encroachment onto or loss of the flood plain occurs and/or that only water compatible development such as Open Space would be permitted for the lands which are identified as being
		at risk of flooding within that site. In Flood Zone C, where the probability of flooding is low (less than 0.1%, Flood Zone C), site-specific Flood Risk Assessment may be required and the developer
	Ilway County Council	should satisfy themselves that the probability of flooding is appropriate to the development being proposed.

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-	Significant Adverse	
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	Ommitigated	In addition to the County Plan SFRA datasets (including the Flood Zones, CFRAMS mapping, historical and predictive groundwater mapping, predictive pluvial mapping and historical flood risk
		indicator mapping, such as the Benefitting Lands mapping), new and emerging datasets (such as the OPW's National Fluvial Mapping that will supersede existing PFRA fluvial mapping for catchments
		greater than 5km2) must be consulted by prospective applicants for developments and will be made available to lower-tier Development Management processed in the Council. Applications for
		developments in coastal areas and associated assessments shall also consider wave overtopping and coastal erosion.
		FL 9 SFRA of Lower Tier Plans Lower tier plans shall undertake SFRA (Strategic Flood Risk Assessment) in compliance with the Flood Risk Management Guidelines.
		FL 10 SFRA/FRA and Climate Change
		SFRAs and site-specific FRAs shall provide information on the implications of climate change with regard to flood risk in relevant locations. The 2009 OPW Draft Guidance on Assessment of Potential
		Future Scenarios for Flood Risk Management (or any superseding document) shall be consulted with to this effect.
		FL 11 FRA and Environmental Impact Assessment (EIA)
		Flood risk may constitute a significant environmental effect of a development proposal that in certain circumstances may trigger a sub-threshold EIA. FRA should therefore be an integral part of any
		EIA undertaken for projects within the County. FL 12 Inland Fisheries It is a policy objective of the Planning Authority to consult, where necessary, with Inland Fisheries Ireland, the National Parks and Wildlife Service and other relevant agencies
		in the construction of flood alleviation measures in County Galway.
		FL 13 CFRAM
		It is a policy objective of the Planning Authority to take account of and incorporate into local planning policy and decision making, including possible future variations to this plan, CFRAM measures
		that may be published in the future, including planned investment measures for managing and reducing flood risk.
		FL 14 Flood Vulnerable Zones
		It is a policy objective of the Planning Authority to ensure that applications pertaining to existing developments in flood vulnerable zones provide details of structural and non-structural risk management measures to include, but not be limited to specifications of the following - floor levels, internal layout, flood resilient construction, flood resistant construction, emergency response
		planning, access and egress during flood events.
		FL 15 Flood Risk Management
		Ensure each flood risk management activity is examined to determine actions required to embed and provide for effective climate change adaptation as set out in the OPW Climate Change Sectoral
		Adaptation Plan for Flood Risk Management applicable at the time.
		FL 16 Benefitting Land Applications for development on land identified as benefitting land may be prone to flooding, and as such site-specific flood risk assessments may be required in these areas.
		FL 17 Consultation with OPW
		Consult with the OPW in relation to proposed developments in the vicinity of drainage channels and rivers for which the OPW are responsible and retain a strip on either side of such channels where
		required, to facilitate maintenance access thereto. In addition, promote the sustainable management and uses of water bodies and avoid culverting or realignment of these features.
		FL 18 Inappropriate Development on Flood Zones Where a development/land use is proposed within any area subject to this objective the development proposal will need to be accompanied by a detailed hydrological assessment and robust SUDS
		design which demonstrates the capacity to withstand potential flood events to maintain water quality and avoid potential effects to ecological features.
		Any development proposals should be considered with caution and will be required to comply with The Planning System and Flood Risk Management Guidelines for Planning Authorities/Circular
		PL2/2014 & the associated Development Management Justification Test.
		Climate Change should be duly considered in any development proposal.
		• Protect the riparian zones of watercourse systems throughout the plan area through a general 10 metre protection buffer from rivers within the plan area as measured from the near riverbank, (this
		distance may be increased and decreased on a site by site basis, as appropriate). • Any development proposals submitted for this site will require a detailed ecological report (s), carried out by suitably qualified personnel for the purposes of informing Appropriate Assessment
		Screening by Galway Council, the competent authority.
		• The relevant lands will be outlined and flagged with a symbol on the land use zoning map and on the GIS system of Galway County Council so that staff and the public are aware of the special
		conditions/constraints attached.
	D. I I'. I	• A briefing will be provided to relevant staff within Galway County Council on the special conditions and constraints on relevant lands.
Air and Climatic	 Potential conflict between 	Also refer to Plan's various sustainable transport provisions and detailed measures for Climate Action. AQ 1 Ambient Air Quality
Factors	development under	To promote the preservation of best ambient air quality compatible with sustainable development in accordance with the EU Ambient Air Quality and Cleaner Air for Europe (CAFÉ) Directive
	the Plan and aiming	(2008/50/EC) and ensure that all air emissions associated with new developments are within Environmental Quality Standards as set out in the Air Quality Standards Regulations 2011 (SI No. 180 of
	to reduce carbon	2011) (or any updated/superseding documents).
	emissions in line	AQ 2 Assessment of Air Quality
	with local, national	To require developments which would have the potential to have adverse impacts on air quality to carry out assessments of the impact of the development on air quality.
	and European environmental	AQ 3 Air Quality Mitigation Measures To require the use of appropriate mitigation measures such as dust dampeners to minimise the potential impacts of developments on air quality.
	objectives.	To require the use of appropriate minigation measures such as aust dumperiors to minimise the potential impacts of developments on all quality.
	 Potential conflicts 	

Topic	Potentially	Recommendations integrated into the Plan, included in:
	Significant Adverse Effect, if	
	Unmitigated	
	between transport	AQ 4 Air Purification
	emissions, including	Galway County Council shall encourage landscaping and deciduous tree planting in an environmentally sensitive manner within towns and villages as a means of air purification, the filtering of
	those from cars, and	suspended particles and the improvement of their micro-climate.
	air quality.	AQ 5 Radon
	 Potential conflicts between increased 	Galway County Council shall have regard, to the specific guidance on radon prevention measures for new homes as contained within the existing Building Regulations (including any updated/superseding Regulations that may be published within the lifetime of this Development Plan).
	frequency of noise	NP 1 Galway County Council Noise Action Plan 2019-2023
	emissions and	To implement the Galway County Council Noise Action Plan 2019-2023 (and any subsequent Plan) in order to avoid, prevent and reduce the harmful effects, including annoyance, due to
	protection of	environmental noise exposure.
	sensitive receptors.	NP 2 Developments within Noise Maps (Noise Action Plan 2019-2023)
	Potential conflicts	To require that where new developments are proposed within the noise limits of the noise maps for the designated sections of roads in the County, appropriate mitigation measures are undertaken so
	with climate	as to prevent harmful effects from environmental noise.
	adaptation measures including those	NP3 Noise Impact Assessments To require an assessment of impact of the development on noise levels, having regard to the provisions of the Environmental Protection Agency Acts 1992 and 2003 and the EPA Noise Regulations
	relating to flood risk	1994 when assessing planning application.
	management.	NP 4 Noise Pollution and Regulation
		Restrict development proposals causing noise pollution in excess of best practice standards and regulate and control activities likely to give rise to excessive noise, other than those activities which are
		regulated by the EPA
		NP 5 Noise Mitigation Measures
		Require activities likely to give rise to excessive noise to install noise mitigation measures and monitors. The provision of a noise audit may be required where appropriate.
		CC 1 Climate Change Support and facilitate the implementation of European, National and Regional objectives for climate adaptation and mitigation taking into account other provisions of the Plan (including those relating
		to land use planning, energy, sustainable mobility, flood risk management and drainage) and having regard to the Climate mitigation and adaptation measures.
		CC 2 Transition to a low carbon, climate-resilient society
		It is a policy objective of the Planning Authority to support the transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050, by way of reducing
		greenhouse gases, increasing renewable energy, and improving energy efficiency.
		CC 3 County Galway Climate Adaptation Strategy 2019-2024
		To implement the County Galway Climate Adaptation Strategy 2019-2024 as appropriate.
		CC 4 Local Authority Climate Action Plan Support the preparation of a Climate Action Plan for County Galway.
		Support the preparation of a climinal Action Half for County Galway. CC 5 Climate Adaptation and Mitigation
		To promote, support and direct effective climate action policies and objectives that seek to improve climate outcomes across County Galway through the encouragement and integration of
		appropriate mitigation and adaptation considerations and measures into all development and decision-making processes.
		CC 6 Local Authority Renewable Energy Strategy (LARES)
		To support the implementation of the Renewable Energy Strategy contained in Appendix 1 of the Galway County Development Plan to facilitate the transition to a low carbon county.
		CC 7 Climate Action Fund Support the delivery of sustainable development projects under the European Green Deal and utilise the Climate Action Fund/ Just Transition Fund established under the National Development Plan to
		encourage public and private climate mitigation and adaptation projects in line with criteria set out by the Fund at that time.
		CC 8 Climate Action and Development Location
		To implement, through the plan and future local areas plans, policies that support and encourage sustainable compact growth and settlement patterns, integrate land use and transportation, and
		maximise opportunities through development location, form, layout and design to secure climate resilience and reduce carbon dioxide and greenhouse emissions.
		CC 9 Mainstreaming Climate Change Adaptation
		Galway County Council shall incorporate climate change adaptation into land use planning, building layouts, energy, transport, natural resource management, forestry, agriculture and marine waters.
		CC 10 Green Infrastructure Galway County Council shall promote the benefit of open spaces and implement the integration of green infrastructure/networks (e.g., interconnected network of green spaces (including aquatic
		ecosystems) and other physical features on land) into new development and regeneration proposals in order to mitigate and adapt to climate change.
Material	Failure to provide	Also refer to measures under other environmental components including Population and Human Health, Cultural Heritage, Soil, Water, Air, various Land Use and Phasing provisions.
Assets	adequate and	RH 11 Waste Water Treatment provision
	appropriate waste	Provide for sustainable rural housing in the county in accordance with the EPA Code of Practice: Wastewater Treatment Systems for Single Houses (2009).
	water treatment	AD4 Agriculture Waste
	(water services	To ensure agricultural waste is managed and disposed of in a safe, efficient and sustainable manner having regard to the environment and in full compliance with the European Communities Good
	infrastructure and capacity ensures the	Agricultural Practice for the Protection of Waters Regulations (2014) and relevant best practice guidelines. WS 1 Enhancement of Water Supply Infrastructure
	Lapacity ensures the	ws i chinancement of water supply fill astructure

Topic	Potentially	Recommendations integrated into the Plan, included in:	
	Significant Adverse Effect, if		
	Unmitigated		
	mitigation of	Liaise with Irish Water, to maximise the potential of existing capacity and to facilitate the timely delivery of new water services infrastructure, to facilitate existing and future growth.	
	potential conflicts).	WS 2 Protection of Water Supplies	
	Failure to adequately	Collaborate with Irish Water and the Group Water Federation Scheme to protect, conserve and enhance all existing and potential water resources in the County to ensure compliance with the	
	treat surface water run-off that is	European Union (Drinking Water) Regulations 2014 (as amended) and compliance of water supplies with the parameters identified in these Regulations. WS 3 River Basin Management Plan for Ireland 2018-2021	
	discharged to water	Support the implementation of the relevant recommendations and measures as outlined in the relevant River Basin Management Plan 2018-2021, and associated Programme of Measures, or any such	
	bodies (water	plan that may supersede same during the lifetime of this plan.	
	services	WS 4 Requirement to Liaise with Irish Water – Water Supply	
	infrastructure and	Ensure that new developments are adequately serviced with a suitable quantity and quality of drinking water supply and require that all new developments intending to connect to a public water	
	capacity ensures the	supply liaise with Irish Water with regard to the water (and wastewater) infrastructure required.	
	mitigation of potential conflicts).	WS 5 Private Water Supply Support the provision of a private water supply in instances where there is no public water supply or where the existing supply does not have sufficient capacity to serve the proposed development.	
	Failure to comply	This will only be considered where it can be demonstrated that the proposed water supply meets the standards set out in the EU and national legislation and guidance including adherence to Article 6	
	with drinking water	of the EU Habitats Directive, and would not be prejudicial to public health or would not significantly impact negatively on the source or yield of an existing supply.	
	regulations and	WS 6 Water Framework Directive	
	serve new	Support the preparation of Drinking Water Safety Plans and Source Protection Plans to protect sources of public water supply, in accordance with the requirements of the Water Framework Directive.	
	development with	WS 7 Water Quality	
	adequate drinking water (water	Require that new development proposals would ensure that there would not be an unacceptable impact on water quality and quantity including surface water, ground water, designated source protection areas, river corridors and associated wetlands.	
	water (water services	WS 8 Proliferation of Septic Tanks	
	infrastructure and	Encourage the use of high standard treatment plants to minimise the risk of groundwater pollution.	
	capacity ensures the	CWS 1 Water Conservation with all Developments	
	mitigation of	To ensure all developments incorporate water conservation measures such as rainwater harvesting to minimise wastage of water supply.	
	potential conflicts).	CWS 2 Water Mains Rehabilitation	
	Increases in waste	To assist Irish Water in their commitment to water conservation and support efforts to tackle leakage through find and fix (active leakage control) and water mains rehabilitation.	
	levels. • Potential impacts	CWS 3 Promotion of Water Conservation To support Irish Water in promoting public awareness and involvement in water conservation measures by households, business and industry.	
	upon public assets	WW 1 Enhancement of Wastewater Supply Infrastructure	
	and infrastructure.	Work in conjunction with Irish Water to maximise the potential of existing capacity and to facilitate the delivery of new wastewater services infrastructure, to facilitate future growth in the county. The	
	 Interactions between 	Ballinasloe area will not be suitable or considered appropriate siting for a regional Connaught/Ulster waste management facility and/or as a regional or County sludge hub given its proximity to	
	agriculture and soil,	Environmentally sensitive sites including Natura 2000, SPC, SACs under Habitat, Birds and Wildlife Directives, proximity to River Suck and Shannon, floodplain and groundwater risks/conflicts,	
	water, biodiversity	unsatisfactory water status with regard to Water framework obligations and River Basin Management plans, interference with progressive sustainable development plans with regard to National	
	and human health - including	Cycleway Spur, Suck Bathing and emerging Water recreation feasibility plans, and in keeping with Environmental Justice Principles of affording the population and environment of Ballinasloe the opportunity to evolve, flourish and regenerate after repeated chronic siting of waste facilities in the area in order to guarantee that those living in Ballinasloe have equal access to a healthy, safe, and	
	phosphorous and	sustainable environment, as well as equal protection from environmental harm.	
	nitrogen deposition	The Tuam Area will not be suitable or considered appropriate siting for a regional Connaught/Ulster waste management facility and/or as a regional or County sludge hub given its proximity to the	
	as a result of	SAC Lough Corrib and River Clare flood plain and the processing or associated treatment will not be permitted in the lifetime of the plan. "	
	agricultural activities	WW 2 Delivery of Wastewater Infrastructure "Liaise and co-operate with Irish Water in the implementation and delivery of the Water Services Strategic Plan (2015) and the Irish Water Investment	
	and the production	Plan 2020-2024 and other relevant investment works programmes of Irish Water in the delivery of infrastructure within the county.	
	of secondary inorganic particulate	The Ballinasloe area will not be suitable or considered appropriate siting for a regional Connaught/Ulster waste management facility and/or as a regional or County sludge hub given its proximity to Environmentally sensitive sites including Nature 2000, SPC, SACs under Habitat, Birds and Wildlife Directives, proximity to River Suck and Shannon, floodplain and groundwater risk/conflicts,	
	matter.	unsatisfactory water status with regard to Water framework obligations and River Basin Management plans, interference with progressive sustainable development plans with regard to National	
	matter.	Cycleway Spur, Suck Bathing and emerging Water recreation feasibility plans, and in keeping with Environmental Justice Principles of affording the population and environment of Ballinasloe the	
		opportunity to evolve, flourish and regenerate after repeated chronic siting of waste facilities in the area in order to guarantee that those living in Ballinasloe have equal access to a healthy, safe and	
		sustainable environment, as well as equal protection from environmental harm.	
		The Tuam Area will not be suitable or considered appropriate siting for a regional Connaught/Ulster waste management facility and/or as a regional or County sludge hub given its proximity to the	
		SAC Lough Corrib and River Clare flood plain and the processing or associated treatment will not be permitted in the lifetime of this plan. "	
		WW 3 The Greater Galway Area Strategic Drainage Study To seek to accelerate and support the delivery of the Greater Galway Area Strategic Drainage Study and the associated solutions as identified in the RSES as an essential infrastructure requirement in	
		conjunction with the Department of the Environment, Climate and Communications, Irish Water and Galway City Council.	
		WW 4 Requirement to Liaise with Irish Water – Wastewater	
		Ensure that new developments will only be permitted which are adequately serviced with sufficient capacity for appropriate collection, treatment and disposal (in compliance with the Water	
		Framework Directive and River Basin Management Plan) to the public sewer unless provided for otherwise by the plan. Developers shall liaise with Irish Water with regard to the wastewater (and	
	lway County Council	water) infrastructure to ensure sufficient capacity is available prior to the submission of a planning application. "	

Topic	Potentially	Recommendations integrated into the Plan, included in:	
Topic	Significant Adverse	Recommendations integrated into the Figure Incidued in.	
	Effect, if		
	Unmitigated		
		WW 5 Serviced Sites Support the contribing of small tourne and villages including initiatives to provide an alternative to any off housing in the country vide in accordance with the National Diamning Francework	
		Support the servicing of small towns and villages including initiatives to provide an alternative to one-off housing in the countryside, in accordance with the National Planning Framework. WW 6 Private Wastewater Treatment Plants	
		Ensure that private wastewater treatment plants, where permitted, are operated in compliance with Environmental Protection Agency (EPA) Code of Practice for Domestic Waste Water Treatment	
		System 2021 (Population Equivalent ≤10).	
		W 7 Sustainable Drainage Systems	
		require the use of Sustainable Drainage Systems to minimise and limit the extent of hard surfacing and paving and require the use of SuDS measures be incorporated in all new developments. All development proposals shall be accompanied by a comprehensive SuDS assessment including run-off quantity, run off quality and imp	
		ncluding extensions to existing developments). All development proposals shall be accompanied by a comprehensive SuDS assessment including run-off quantity, run off quality and impacts abitat and water quality.	
		WW 8 Storm Water Infrastructure	
		To support the improvement of storm water infrastructure and to increase the use of sustainable drainage and reduce the risk of flooding in urban environments.	
		WM 1 Connacht and Ulster Waste Management Plan 2015-2021	
		Support the implementation of the Connacht and Ulster Waste Management Plan 2015-2021 or any updated version of this document within the lifetime of the plan. WM 2 Requirements for Waste Management	
		Support and promote the circular economy principles, prioritising prevention, reuse, recycling and	
		recovery, and to sustainably manage residual waste. New developments will be expected to take account of the provisions of the Waste Management Plan for the Region and observe those elements	
		of it that relate to waste prevention and minimisation, waste recycling facilities, and the capacity for source segregation. WM 3 Waste Recovery and Disposal Facilities	
		Support and facilitate the provision of adequate waste recovery and disposal facilities for the County.	
		WM 4 Waste Legalisation	
<u> </u>	D	To require that all waste disposal shall be undertaken in compliance with the requirements of the Environmental Protection Agency and relevant Waste Management Legislation.	
Cultural Heritage	Potential effects on protected and	AH 1 Architectural Heritage Ensure the protection of the architectural heritage of County Galway, which is a unique and special resource, having regard to the policy guidance contained in the Architectural Heritage Protection	
Heritage	unknown	Guidelines 2011 (and any updated/superseding document).	
	archaeology and	AH 2 Protected Structures (Refer to Appendix 6)	
	protected	(a) Ensure the protection and sympathetic enhancement of structures including their curtilage and attendant grounds included and proposed for inclusion in the Record of Protected Structures (RPS)	
	architecture arising	that are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest, together with the integrity of their character and setting. (b) Review the Record of	
	from construction and operation	Protected Structures in order to provide a comprehensive schedule for the protection of structures of special importance in the County during the lifetime of the plan. (c) Ensure that development proposals are appropriate in terms of architectural treatment, character, scale and form to the existing protected structure and not detrimental to the special character and integrity of the protected	
	activities	structure and its setting. (d) Ensure high quality architectural design of all new developments relating to or which may impact on structures (and their settings) included in the Record of Protected	
		Structures. (e) Promote and ensure best conservation practice through the use of specialist conservation professionals and craft persons. (f) Prohibit development proposals, either in whole or in part,	
		for the demolition of protected structures, save in exceptional circumstances.	
		AH 3 Protection of Structure on the NIAH Give regard to and consideration of all structures which are included in the NIAH for County Galway, which are not currently included in the Record of Protected Structures, in development	
		management functions.	
		AH 4 Architectural Conservation Areas (Refer to Appendix 7)	
		Protect, conserve and enhance the special character of the Architectural Conservation Areas (ACA) included in this plan through the appropriate management and control of the design, location and	
		layout of new development, modifications, alterations or extensions to existing structures, surviving historic plots and street patterns and/or modifications to the character or setting of the	
		Architectural Conservation Area. Works within the ACA shall ensure the conservation of traditional features and building elements that contribute to the character of the area. The special character of an area includes its traditional building stock and material finishes, spaces, streetscape, shop fronts, landscape and setting. New proposals shall have appropriate regard to scale, plot, form, mass,	
		design, materials, colours and function.	
		This will be achieved by;	
		(a) Protecting all buildings, structures, groups of structures, sites, landscapes and all features which contribute to the special character of the ACA from demolition and non-sympathetic alterations.	
		(b) Promote appropriate and sensitive reuse and rehabilitation of buildings and sites within the ACA. (c) Ensure new development within or adjacent to an ACA respects the established character of	
		the area and contributes positively in terms of design, scale, setting and material finishes to the ACA. (d) Promote high quality architectural design within ACAs. (e) Seek the repair and reuse of traditional shopfronts and where appropriate, encourage new shopfronts of a high quality architectural design. (f) Ensure that all new signage, lighting, advertising and utilities to buildings within ACA	
		are designed, constructed, and located in such a manner that they do not detract from the character of the ACA. (g) Protect and enhance the quality of open spaces within ACAs and ensure the	
		protection and where necessary reuse of street furniture and use of appropriate materials during the course of public infrastructure schemes within ACAs. (h) Prohibit development proposals, either in	
		whole or in part for the demolition of a structure within an Architectural Conservation Area that contributes to the special character of the area. (i) Protect structures in ACAs from non-¬sympathetic	
		alterations and encourage appropriate in-fill developments. (j) Works materially affecting the character of a protected structure or the exterior of a building/structure within an ACA will require	
		planning permission; (k) Any works carried out to a protected structure or the exterior of a building/structure within an ACA shall be in accordance with best conservation practice and use sustainable and appropriate materials. (I) Ensure that any development, modifications, alterations, or extensions materially affecting the character of a protected structure, or a structure adjoining a protected	
		structure, or a structure within or adjacent to an Architectural Conservation Area (ACA), is sited and designed appropriately and is not detrimental to the character or setting of the protected structure	
L	L	and the state of t	

Topic	Potentially	Recommendations integrated into the Plan, included in:	
	Significant Adverse Effect, if		
	Unmitigated		
		or of the ACA.	
		AH 5 Maintenance and Re-use of existing Building Stock Promote the maintenance and appropriate re-use of the existing stock of buildings with architectural merit as a more sustainable option to their demolition and redevelopment.	
		AH 6 Vernacular Architecture	
		Recognise the importance of the contribution of vernacular architecture to the character of a place and ensure the protection, retention and appropriate revitalisation and reuse of the vernacular built heritage including structures that contribute to landscape and townscape character and resist the demolition of these structures. AH 7 Local Place Names	
		Protect local place names as an important part of the cultural heritage and unique character of an area. Support the use of appropriate names for new developments that reflect the character and heritage of the area and that contribute to the local distinctiveness of a place. AH 8 Energy Efficiency and Traditionally Built Structures	
		Ensure that measures to upgrade the energy efficiency of protected structures and traditionally built historic structures are sensitive to traditional construction methods, employ best practice and use appropriate materials and methods that will not have a detrimental impact on the material, functioning or character of the building.	
		AH 9 Local Landscape and Place Assessment To support proposals from local communities including Tidy Town Committees, Chambers of Commerce and residents' groups in analysing the character of their place and promoting its regeneration for their own use and enjoyment and that of visitors to the area. AH 10 Designed Landscapes	
		Protect the surviving historic designed landscapes in the County and promote the conservation of their essential character, both built and natural. Consider protection of the designed landscape by inclusion in an Architectural Conservation Area. Development proposals in designed landscape shall be accompanied by an appraisal of the contributing elements and an impact assessment. AH 11 Custodianship	
		Promote an inter-disciplinary approach demonstrating best practice with regard to the custodianship of protected structures, recorded monuments and elements of built heritage. AH 12 Placemaking for Towns and villages	
		Promote the value of placemaking in cooperation with communities in their towns, villages and local areas. AH 13 Traditional Building Skills	
		Support and promote traditional building skills, training and awareness of the use of appropriate materials and skills within the Local Authority, community groups, owners and occupiers of traditionally built structures.	
		AH 14 Design and Landscaping in New Buildings Encourage new buildings that foster an innovative approach to design and acknowledges the diversity of suitable design solutions in appropriate locations while promoting the added economic, amenity and environmental value of good design. ARC 1 Legislative Context	
		Support and promote the preservation, conservation and appropriate management and enhancement of the County's archaeological sites and monuments, together with the settings of these monuments, having regard to the legislative, statutory and policy provisions relevant to the conservation of the archaeological heritage. ARC 2 Archaeological Sites	
		Seek to encourage and promote awareness of and access to archaeological heritage of the County for all, through the provision of information to landowners and the community generally, in cooperation with statutory and other partners. ARC 3 Archaeological Landscapes	
		To facilitate where possible the identification of important archaeological landscapes in the County	
		ARC 4 Protection of Archaeological Sites All planning applications for new development, redevelopment, any ground works, refurbishment, and restoration, etc. within areas of archaeological potential or within close proximity to Recorded Monuments or within the historic towns of County Galway will take account of the archaeological heritage of the area and the need for archaeological mitigation.	
		ARC 6 Burial Grounds Protect the burial grounds, identified in the Record of Monuments and Places, in co-operation with the National Monuments Service of the Department of Housing, Local Government and Heritage. Encourage the local community to manage burial grounds in accordance with best conservation and heritage principles. ARC 7 Battlefield Sites	
		Protect the Battle of Aughrim site and other battlefield sites and their settings.	
		ARC 8 Underwater Archaeological Sites To protect and preserve the archaeological value of underwater archaeological sites and associated features. In assessing proposals for development, the Council will take account of the potential underwater archaeology of rivers, lakes, intertidal and sub¬tidal locations.	
		ARC 9 Recorded Monuments Ensure that any development in the immediate vicinity of a Recorded Monument is sensitively designed and sited and does not detract from the monument or its visual amenity. ARC 10 Zones of Archaeological Potential	
		To protect the Zones of Archaeological Potential located within both urban and rural areas and around archaeological monuments generally as identified in the Record of Monuments and Places. Any development within the ZAPs will need to take cognisance of the potential for subsurface archaeology and if archaeology is demonstrated to be present appropriate mitigation (such as preservation in situ/buffer zones) will be required.	

Topic	Potentially Significant Adverse Effect, if Unmitigated	Recommendations integrated into the Plan, included in:
		ARC 11 Industrial and Post Medieval Archaeology Protect and preserve the archaeological value of industrial and post medieval archaeology such as mills, limekilns, bridges, piers, harbours, penal chapels and dwellings. Proposals for refurbishment, works to or redevelopment/conversion of these sites should be subject to careful assessment. ARC 12 Archaeology and Infrastructure Schemes Have regard to archaeological concerns when considering proposed service schemes (including electricity, sewerage, telecommunications, water supply) and proposed roadwork's (both realignments and new roads) located in close proximity to Recorded Monuments and Places and their known archaeological monuments. CUH 1 Cultural heritage Protect and promote the cultural heritage assets and the intangible cultural heritage assets of County Galway as important social and economic assets. CUH 2 Special Places of Historic Interest To protect and promote where possible special places of historical interest. CUH 3 Placenames/Naming of New Developments Promote and preserve local place names, local heritage and the Irish language by ensuring the use of local place names or geographical or cultural names which reflect the history and landscape of their settings in the naming of new residential and other developments. All names will be in the Irish language only. The naming and numbering schemes including associated signage must be submitted to the Planning Authority prior to the commencement of a new development. CUH 4 The Gaeltacht and Linguistic Heritage (a) To protect the linguistic and cultural heritage of the Gaeltacht and to promote Irish as a community language and culture. To work in a positive and encouraging way to create and maintain a bilingual environment in the County, and to ensure the availability of opportunities for the use of spoken and written Irish. CUH 5 Library and Archives (a) To facilitate the development and implementation of Galway Library Development Programme 2016-2021 or subsequent programme and support the de
Landscape	Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape.	Preserve and enhance the character of the landscape where, and to the extent that, in the opinion of the Planning Authority, the proper planning and sustainable development of the area requires it, including the preservation and enhancement, where possible of views and prospects and the amenities of places and features of natural beauty or interest.

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 authorities³ 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.

SEA scoping submissions were received from the Environmental Protection Agency, the Department of Communications, Climate Action and Environment and the Department of Culture, Heritage and the Gaeltacht. The issues raised in these submissions and how these issues have been taken into account during preparation of the Plan and the SEA are provided on below. Taking into account these submissions included integrating environmental considerations into the Plan, including through the selection of Plan provisions identified on Table 2.2).

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³ The following authorities were notified: Department of Agriculture, Food and the Marine; Department of Culture, Heritage and the Gaeltacht; Department of Communications, Climate Action and Environment; Department of Housing, Planning and Local Government; Environmental Protection Agency; Mayo County Council; Roscommon County Council; Offaly County Council; Tipperary County Council; Clare County Council; and Galway City Council.

Table 3.1 Taking into account SEA Scoping Submissions

No.	3.1 Taking into account SEA Scoping Submissions Submission text	Response	
		-	
1	Submission from the Department of Communications, Climate Action and Environment (Geological Survey Ireland)		
Α	With reference to your email received on 19 June 2020, concerning the SEA Scoping for preparation of a new Galway County Development Plan 2022-2028, Geological Survey Ireland (a division of Department of Communications, Climate Action and Environment) welcome the opportunity to be included in the consultation process at this early 'SEA scoping' stage.	Noted.	
В	Geoheritage	Relevant County Geological	
	The Geological heritage county audit was completed last year and launched In January 2020. GSI welcomes the mention of the County Geological Sites (CGSs) within the draft development plan under Section 3.4. However, we would encourage their inclusion as specific policy objectives under Sections 3.4, 3.9 and 4.1. The following points are suggested by the Irish Geological Heritage Programme of Geological Survey Ireland, as appropriate ways in which to address the need to protect geological heritage in any one of Ireland's local authority areas: As a minimum, GSI would like the Local Authority to include a policy objective with wording such as: "to protect from Inappropriate development the scheduled list of geological heritage sites [Appendix X]." Or "to protect from inappropriate development the following list of County Geological Sites" The IGH Programme views the Local Authorities as critical partners in protecting, through the planning system, those CGS which fall within their county limits. In many cases these are often sites of high amenity or educational value, already zoned or listed in the plan. listing in the CDP provides protection of the sites against potentially damaging developments that normally require planning permission, such as building, quarrying, landfilling or forestry. It is also important that the democratic process of public consultation and approval by councillors of the CDP means that stakeholders in the sites and all the local community can buy into the process. CGSs have been adopted in the National Heritage Plan, and will form a major strand of geological nature conservation to complement the various ecological and cultural conservation measures. It is important to note however, that management issues for the majority of geological heritage sites may differ from ecological sites, and m some cases development may	Sites have been considered in the preparation of this report and will be considered throughout the SEA process.	
	facilitate enhanced geological understanding of a site by exposing more rock sections - for example, in a quarry extension. Consultation at the earliest stages can identify any issues relevant to an individual site or proposed development. County Geological Sites are the optimal way of addressing the responsibility of each authority under the Planning and Development Act 2000 and its amendments, to protect sites of geological interest. It would also be necessary to include a policy objective to protect geological NHAs as they become designated and notified to the Local Authority, during the lifetime of the Plan. As always we are available if you require any further information, please feel free to		
С	contact Clare Glanville (Clare.Glanville@gsi.ie). Culture and Tourism	Noted. This information and	
	Over the past number of years geology has become a large part of Irish tourism. Ireland currently has three UNESCO Global Geoparks, with one aspiring Geopark, Joyce Country and Western Lakes Aspiring Geopark. The aim of the project is to develop a geopark in the area surrounding Joyce Country on the Galway-Mayo border, and Loughs Mask, Carra and Corrib, with the intention of applying for full UNESCO Global Geopark status in 2022. The Burren and Cliffs of Moher UNESCO Global Geopark with its karst limestone landscape incorporate parts of South Galway and include the Galway towns of Kinvarra and Gort. These Geoparks, along with other tourism initiatives such as the Wild Atlantic Way, Ireland's Ancient East, and Ireland's Hidden Heartlands have bolstered tourism in various parts of Ireland and helped to increase its levels in areas that were previously not as popular with tourists. We would encourage Galway County Council to continue this trend, and to use the geological audit information making it easily available to the general public. We would encourage geology to be a significant part of any tourism initiative that may be introduced.	recommendations will be considered throughout the SEA process.	
D	Dimension Stone/Stone Built Ireland Geological Survey Ireland recently signed a research collaboration agreement between GSI, TCD & OPW, to run for a 2 year period with the aim of documenting building and decorative stone in Ireland to inform government agencies, building owners and conservationists of the sources for suitable replacement stone in restoration work and to develop a greater awareness among the general public. In addition to promoting	Noted – such issues will be taken into account when preparing SEA recommendations relating to cultural heritage.	

No.	Submission text	Response
	citizen science and awareness of local materials, the inventory will aid the public in complying with part 4 of the Planning and Development Act 2000, which requires owners to conserve protected structures. It will also assist local authorities in issuing Section S7 Declarations, which outline 'the type of works which it considers would or would not materially affect the character of the structure or any element of the structure'. This project will build on work already completed funded by the Irish Research Council (March 2019-September 2020) that carried on primary research on the topic and developed a simple database and web-based platform as well as hosting various heritage displays at venues.	
E	Geological Mapping Geological Survey Ireland (GSI) geological mapping programme creates maps that depict the rocks (Bedrock Mapping) and subsoils (Quaternary & Physiographic Mapping) of the onshore area of Ireland. We collect new data by field surveying and borehole drilling, and combine them with existing mapping to produce map products at various scales and levels of complexity. GSI maintains online data sets of bedrock and subsoils geological mapping that is reliable, accessible and meets the requirements of all users. These data sets include depth to bedrock data and subsoil classifications. We would encourage you to use this data in any planned SEA reports and for informing your County Development Plan (2022-2028).	Mineral resources will be recognised as a material asset by the SEA. Aquifer productivity and vulnerability mapping will be included in the SEA Environmental Report and the SEA will reference datasets available from GSI that may
F	Groundwater Groundwater is important as a source of drinking water, and it supports river flows, Jake levels and ecosystems. It contains natural substances dissolved from the soils and rocks that it flows through, and can also be contaminated by human actions on the land surface. As a clean, but vulnerable, resource, groundwater needs to be understood, managed and protected through our Groundwater Programme. Geological Survey Ireland provides advice and maps to members of the public, consultancies and public bodies about groundwater quality, quantity and distribution. Geological Survey Ireland monitors groundwater nationwide by characterising aquifers, investigating karst landscapes and landforms and by helping to protect public and group scheme water supplies. We recommend the use of GSI's National Aquifer, Vulnerability and Recharge maps within the COP. Further information is available on our Ma viewer. With regard to Flood Risk Management, there is a need to identify areas for integrated mitigation and management and we note reference within the draft SEA scoping report to the OPW datasets on flooding in Section 3.5.2. Our GWFlood project is a groundwater flood monitoring and mapping programme aimed at addressing the knowledge gaps surrounding groundwater flooding in Ireland. The project is providing the data and analysis tools required by local and national authorities to make scientifically-informed decisions regarding groundwater flooding. This is primarily focused on karst areas such as those located in Galway, which will provide vital information to benefit the CDP. We recommend using the GSI's GWFlood tools found under our programme activities to this end. With regards to Climate Change, there is a need to improve the monitoring capacity of groundwater levels in Ireland so that the potential impacts of climate change can be monitored and assessed. In this context the GSI has established the GWClimate project in January 2020. GWClimate will 1) establish a long-term strategic groundwater level monitori	be useful to lower-tier project planning, including those relating to Aquifer Productivity, Aquifer Vulnerability, Bedrock Geology, Quaternary Geology, Geothermal energy potential, Mineral deposits, Groundwater Resources and Geohazards, such as Landslide Events and Landslide Susceptibility Mapping. The flood mapping referred to will also be considered by the Strategic Flood Risk Assessment, the findings of which inform the SEA.
G	Geohazards Geohazards Geohazards can cause widespread damage to landscapes, wildlife, human property and human life. While in Ireland, landslides are the most prevalent of these hazards flooding is becoming an increasing risk. Geological Survey Ireland has information available on past landslides for viewing as a layer on our Map Viewer. Geological Survey Ireland also engages in national projects such as Landslide Susceptibility Mapping and Groundwater Flooding (GWFlood), and in international projects, such as the Tsunami Warning System, coordinated by the Intergovernmental Oceanographic Commission of UNESCO. Historical records and geological evidence indicate that, while tsunamis are unlikely events around Ireland, the Irish coast is vulnerable to tsunamis from submarine landslides and distant earthquakes. Associated levels of coastal flooding are expected to be similar to those seen during storm surges, but with much more energetic inundation and a much shorter time to react. Ireland participates in an international tsunami detection and alerting system, coordinated by the Intergovernmental Oceanographic Commission of UNESCO. We recommend that geohazards and particularly flooding be taken into consideration, especially when developing areas where these risks are prevalent, and we encourage the use of our data when doing so. Coastal Vulnerability while seen as a potential geohazard, is discussed in more detail under our marine and coastal unit information	

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	below, and may be a useful dataset for the CDP. We welcome the inclusion In Section 3.4, for consideration of use of Geological Survey Ireland's on line mapping data sets for Landslide Events and Landslide Susceptibility. We would also highly recommend the use of Geological Survey Ireland's Bedrock geology, Groundwater and GWFlood data sets to identify potential structural failures in Karst areas.	
Н	Geothermal Energy Geothermal energy harnesses the heat beneath the surface of the Earth for heating applications and electricity generation, and has proven to be secure. environmentally sustainable and cost effective over long time periods. Geothermal applications can range in depth from a few metres below the surface to several kilometres. Ireland has widespread shallow geothermal resources for small and medium-scale heating applications, which can be explored online through Geological Survey Ireland's Geothermal Suitability maps for both domestic and commercial use. We recommend use of our Geothermal Suitability maps, to determine the most suitable type of ground source heat collector for use with heat pump technologies. The Geothermal Suitability maps could also be considered in Section 3.7.7 as part of the Renewable Energy Potential for the CDP. Ireland also has recognised potential for 'deep' (>400m) geothermal resources. Geological Survey Ireland currently supports and funds research into this national energy resource. Along with our partners in research and industry we have been investigating the potential for geothermal energy in Ireland. Although Ireland does not possess high temperature (high enthalpy) reserves such as those in Iceland or the Azores, we do have the potential to use our resources for low enthalpy application such as district heating and industrial processes that require heating/cooling. We are currently completing a roadmap for geothermal energy use in Ireland which we expect to publish in 2020. For further information please see our geoenergy gages on our website or contact the Groundwater Programme of the	
1	Geological Survey Ireland directly. Natural Resources (Minerals/Aggregates) We welcome the reference to mineral locations and aggregate potential in Section 3.7. These are important resources for the future, particularly in relation to the projected public developments, such as sustainable infrastructure development, roads, schools etc., and housing requirements for the County. Geological Survey Ireland is of the view that the sustainable development of our natural resources should be an integral part of all development plans from a national to regional to local level to ensure that the materials required for our society are available when required. Geological Survey Ireland provides data, maps, interpretations and advice on matters related to minerals, their use and their development in our Minerals section of the website. Aggregates are an essenttal natural resource for the construction industry and with the Government of Ireland "Building Ireland 2040" plan, understanding of aggregate source and supply will be important. The Active Quarries, Mineral Localities and the Aggregate Potential maps are available on our Map Viewer. We would welcome the consideration of aggregate potential sterilisation included as part of the scoping document. The relevant datasets described above could also be considered as part of 'sustainability' and 'Material Assets' within the Plan.	
J	Marine and Coastal Unit Geological Survey Ireland's Marine and Coastal Unit manages programmes, projects and partnerships aimed at increasing our knowledge of the marine and coastal realm, developing new methods and tools for understanding coastal processes and taking action on climate change. Geological Survey Ireland's Marine and Coastal Unit in partnership with the Marine Institute, jointly manages INFOMAR, Ireland's national programme focused on seabed mapping; providing key baseline data for Ireland's marine sector. The Marine and Coastal Unit also manage coastal monitoring programmes providing data on coastal erosion and sea level rise including the Climate, Heritage and Environments of Reefs, Islands and Headlands (CHERISH) and the Coastal Vulnerability Index (CVI) mapping projects. We would therefore recommend use of our Marine and Coastal Unit datasets available on our website and Map Viewer.	Available online GSI resources, including mapping resources, have been considered in the preparation of this report and will be considered throughout the SEA and AA processes.
2	Submission from the Environmental Protection Agency	
Α	The EPA is one of five statutory environmental authorities under the SEA Regulations. In our role as an SEA environmental authority, we focus on promoting the full and transparent integration of the findings of the Environmental Assessment into the Plan and advocating that the key environmental challenges for Ireland are addressed as relevant and appropriate to the plan. Our functions as an SEA environmental authority do not include approving or enforcing SEAs or plans.	Noted.

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В	As a priority, we focus our efforts on reviewing and commenting on key sector plans. We again attach our guidance document 'SEA of Local Authority Land Use Plans – EPA Recommendations and Resources'. This document is updated regularly and sets out our key recommendations for integrating environmental considerations into Local Authority land use Plans. We recommend that you take this guidance document into account in preparing the Plan and SEA.	The 'SEA of Local Authority Land Use Plans – EPA Recommendations and Resources' document have been considered in the preparation of this SEA Scoping Report and will be kept on file for reference throughout the SEA process.
С	In preparing the Plan, Galway County Council should also ensure that the Plan aligns with key relevant higher-level plans and programmes and is consistent with the relevant objectives and policy commitments of the National Planning Framework and the Regional Spatial and Economic Strategy for the Northern & Western Region.	These plans and programmes will be considered as part of the preparation of the Plan and associated environmental assessments, as relevant.
D	Specific Comments Climate Action In preparing the Plan, you should take into account the need to align with national commitments on climate change mitigation and adaptation, including those set out in the Climate Action Plan 2019, as well as incorporating any relevant recommendations and measures in sectoral, regional and local climate adaptation and mitigation plans. The Agency recently published Ireland's Greenhouse Gas Emissions Projections for 2018-2040 (EPA, 2019) which should be taken into account in preparing the Plan, as appropriate and relevant. The Agency has also published an update of the existing good practice guidance note on how to incorporate climatic factors into plans and programmes falling under the remit of the SEA Directive — Integrating Climatic Factors into the Strategic Environmental Assessment Process in Ireland (EPA, 2019). Key climate-related aspects to consider in the Plan and SEA, where relevant, include: - Direct and indirect impacts of the Plan on greenhouse gas emissions and removals (Mitigation) - Direct and indirect impacts of climate change on the implementation of the Plan, e.g. the resilience of critical water service infrastructure to flooding and drought (Adaptation) - The linkages between mitigation and adaptation (inter-relationships). Coastal Zone Management	The SEA will seek to ensure that the Plan aligns with national commitments on climate change and adaptation, as well as relevant sectoral, regional and local adaptation plans.
	The Plan should include specific coastal zone management objectives and should consider future climate scenarios in terms of predicted higher sea levels and periods of increased frequency of storm conditions and associated flooding. The Plan should ensure the protection of ecological buffers/marshlands/estuaries, in order that the effects of coastal squeeze on protected species/designated habitats can be managed appropriately where possible. The role which estuaries and marshes play in terms of flood alleviation could also be highlighted.	that the Plan includes specific coastal zone management objectives and that it considers future climate scenarios in terms of predicted higher sea levels and periods of increased frequency of storm conditions and associated flooding. The SEA will also ensure that the Plan provides for the appropriate protection of ecological buffers, marshlands and estuaries.
F	Biodiversity Galway County Council should promote the need to protect non-designated aspects of biodiversity including ecological corridors / linkages / green infrastructure, areas of important local biodiversity etc. To help protect and/or to enhance biodiversity in the Plan area, there is merit in assessing and incorporating any relevant habitat mapping available.	Relevant surveys and habitat mapping will be considered as part of the preparation of the Plan and associated environmental assessments, as relevant.
G	Invasive Alien Species Control and Management A clear commitment should be included to ensure that implementation of the Plan, in particular, any proposed development associated with the Plan, addresses the control and management of invasive species.	Management of invasive species will be addressed by the Plan.
Н	Key Plans and Programmes Some suggested national / regional / sectoral plans to consider in preparing the Plan and SEA are listed below. Spatial Planning - Local Authority Development Plans Sustainable Development - National Implementation Plan for the Sustainable Development Goals Tourism - National Greenways Strategy - Local authority tourism strategies	These plans and programmes will be considered as part of the preparation of the Plan and associated environmental assessments, as relevant.

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	Climate	
	Relevant sectoral, regional and local authority climate adaptation and mitigation plans/strategies – including Climate Change Adaptation Plan for Built and Archaeological Heritage (DCHG, in preparation). - Relevant OPW Flood Risk Management Plans and associated flood risk mapping	
	 National Climate Action Plan 2019 National Energy and Climate Plan (DCCAE, in preparation) 	
	- National Mitigation Plan - National Adaptation Framework	
	Biodiversity - National Biodiversity Action Plan	
	 - All Island Pollinator Plan - Any available biodiversity/heritage plans and habitat mapping 	
	<u>Water & Water Services</u> - River Basin Management Plan for Ireland 2018-2021	
	- Water Services Strategic Plan / Capital Investment Programme and Draft National Water Resources Plan (Irish Water)	
	<u>Transport</u> - Planning Land Use and Transport – Outlook 2040 (DTTAS, in prep)	
	<u>Air & Noise</u> - Local Authority Noise Action Plans	
	 National Clean Air Strategy (DCCAE, in prep) National Air Pollution Control Programme (DCCAE, 2019) 	
ı	Available Guidance & Resources Our website contains various SEA resources and guidance, including:	Available online EPA resources, including mapping
	- SEA process guidance and checklists - Inventory of spatial datasets relevant to SEA	resources, and guidance have been considered in the
	 topic specific SEA guidance (including 'Developing and Assessing Alternatives in SEA', 'Integrating Climatic Factors into SEA' and 'Integrated Biodiversity Impact Assessment') 	preparation of this report and will be considered throughout
	You can access these resources at: www.epa.ie/monitoringassessment/assessment/sea/	the SEA and AA processes.
J	Environmental Sensitivity Mapping (ESM) Webtool	
	The ESM Webtool is a new decision support tool to assist SEA and planning processes in Ireland. The tool brings together over 100 datasets and allows users to explore environmental considerations within a particular area and create plan-specific environmental sensitivity maps. These maps can help planners anticipate potential land-use conflicts and help identify suitable development locations, while also	
K	protecting the environment. The ESM Webtool is available at www.enviromap.ie. EPA SEA WebGIS Tool	
	Our SEA WebGIS Tool, available through the EDEN portal (https://gis.epa.ie/EIS_SEA/), allows public authorities to produce an indicative report on key aspects of the environment in a specific geographic area. It is intended to assist in SEA screening and scoping exercises.	
L	EPA WFD Application Our WFD Application provides a single point of access to water quality and catchment data from the national WFD monitoring programme. The Application is accessed through EDEN https://wfd.edenireland.ie/ and is available to public agencies. Publicly	
М	available data can be accessed via the Catchments.ie website. EPA AA GeoTool	
	Our AA GeoTool application has been developed in partnership with the NPWS. It allows users to a select a location, specify a search area and gather available information for each European Site within the area. It is available at: http://www.epa.ie/terminalfour/AppropAssess/index.jsp	
N	State of the Environment Report – Ireland's Environment 2016 In preparing the Plan and SEA, the recommendations, key issues and challenges described within our most recent State of the Environment Report Ireland's Environment – An Assessment 2016 (EPA, 2016) should be considered, as relevant and appropriate to the Plan.	The recommendations, key issues and challenges described within Ireland's Environment will be considered in the preparation of the Plan.
0	Transition to a low carbon climate resilient economy and society	of the Plan. The SEA will seek to ensure that the Plan aligns with
	You should ensure that the Plan aligns with national commitments on climate change mitigation and adaptation, as well as relevant sectoral, regional and local adaptation plans.	that the Plan aligns with national commitments on climate change mitigation and adaptation, as well as relevant sectoral, regional and local adaptation plans.

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P	Environmental Authorities Under the SEA Regulations, you should also consult with: • The Minister for Housing, Planning and Local Government, • The Minister for Agriculture, Food and the Marine, and the Minister for Communications, Climate Action and Environment, where it appears to you as the competent authority that the plan or programme, or modification to a plan or programme, might have significant effects on fisheries or the marine environment, • The Minister for Culture, Heritage and the Gaeltacht where it appears to you as the competent authority that the plan or programme, or modification to a plan or programme, might have significant effects in relation to the architectural or archaeological heritage or to nature conservation, and • any adjoining planning authority whose area is contiguous to the area of a planning authority which prepared a draft plan, proposed variation or local area plan.	Notice has also been given to relevant environmental authorities as part of the SEA scoping process.
3	Submission from the Department of Culture, Heritage and the Gaeltacht	
A	Nature Conservation The Department refers to the current notification/correspondence of Strategic Environmental Assessment (SEA) Scoping for the preparation of a new Galway County Development Plan 2022-2028 from Galway County Council. The Draft SEA Scoping Report was provided to this Department on the 19/6/2020 for observations to inform the scope and level of detail to be included in the final SEA Scoping Report.	Noted.
В	Context of submission This submission is made in the context of this Department's role in relation to nature conservation, and as an Environmental Authority under SEA legislation. The observations primarily concern the issues of biodiversity, fauna and flora, and are offered to assist Galway County Council in meeting its obligations in relation to nature conservation, and relevant Directives and national legislation and obligations in these regards when preparing the Plan or Programme and the SEA Environmental Report. The observations are not exhaustive and are made without prejudice to any observations or recommendations that may be made by the Minister and this Department in the future.	Noted.
С	Process Detail The requirements for Appropriate Assessment (AA) and Strategic Flood Risk Assessment (SFRA) have been clearly defined in the Draft Scoping Report and their context set out within the SEA process which should facilitate the integration of environmental considerations into the Development Plan.	Noted.
D	Integration into the Plan The Plan should be developed to integrate biodiversity considerations in a positive, proactive and precautionary way, and this should be reflected in the text and content of the Plan, including its aims, objectives and policies, as well as in maps, e.g. land use zonings, and suitability categorisations or preferential areas or routes for infrastructural components and interconnections, and for certain developments or land use types. In general, no areas should be identified or targeted for future development or changes in land use without the availability of basic information on the ecological sensitivities of the lands in question, such as a habitat or ecological constraints map, i.e. the precautionary principle should apply. This will serve to ensure that plan-making is robust, informed and evidence-based, and that the expectations or concerns of various parties are better managed, particularly in relation to the likely or realistic development potential of certain areas.	The SEA will consider available information on biodiversity and seek to ensure that biodiversity considerations are integrated into the Plan that provide for adequate and appropriate protection and management of biodiversity. Land Use Zonings provided for the Plan will be subject to the written Plan provisions and will be linked to a Land Use Zoning matrix that will include a variety of development types.
Е	The Plan should include objectives to conserve and maintain key elements of biodiversity within the Plan area and its zone of influence, and to ensure it does not contribute to biodiversity losses or deterioration. If a Plan/Programme contains measures that involve the use of new technologies, the implications of which for biodiversity are unclear or unknown, authorities are advised to include commitments to undertake scientific research to improve and expand understanding of the significant effects that may arise. Your particular attention is drawn to Regulation 27 of the European Communities (Birds and Natural Habitats) Regulations, 2011-2015 (referred to as the 2011 Regulations), as this places particular duties on all Public Authorities in relation to European sites that should be reflected in the Plan commitments and the associated assessments. Among other things, this includes a duty to exercise all functions, including consent functions, in compliance with, and so as to secure compliance with, the requirements of the Habitats and Birds Directives and the 2011 Regulations. Public Authorities are obliged, when exercising their functions, to take appropriate steps to avoid in European sites the deterioration of natural habitats and the habitats of species, as well as disturbance of species for which a site has been designated insofar	The SEA will seek to ensure that biodiversity considerations including those specified in this part of the submission are integrated into the Plan that provide for adequate and appropriate protection and management of biodiversity. The SEA will be informed by an AA which will seek to ensure that considerations relating to the Habitats Directive and transposing Regulations are integrated into the Plan.

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	as this disturbance could be significant in relation to the objectives of the Habitats Directive (see also Section 177S of the Planning and Development Act, 2000 as amended). All Public Authorities are advised to incorporate such obligations into their plans and programmes, and associated assessments, as required and relevant. The Department would also like to draw attention to Part 5 of the European Communities (Birds and Natural Habitats) Regulations, 2011 (and to S177AE of the Planning and Development Acts) and the obligations these place on Public Authorities, including local authorities that are Planning Authorities, whether in its capacity as a Planning Authority or in any other capacity, in relation to screenings for appropriate assessment (AA), and appropriate assessment as may be required. Plans/Programmes should modify commitments or incorporate mitigation measures to ensure compliance with the requirements of Article 6 of the Habitats Directive, and all relevant aspects of the transposing legislation. This includes, for example, obligations in relation to the retention of all records of or in relation to AA screenings, AA conclusions and the reasons therefore, amongst other things (Regulation 61 Retention of Records of the 2011 Regulations). Authorities should also pay particular attention to the requirements of the relevant national legislation when undertaking screenings, Natura Impact Statements or Reports, and appropriate assessments, as these set out or clarify particular standards and processes that are not yet fully reflected in some national guidance documents. In order to assist authorities in the preparation of a Natura Impact Statement (NIS) are set	
F	out later in this submission. Implications of the Plan/Programme, or modification thereof, for Biodiversity, Flora and Fauna Plans and programmes may significantly affect nature conservation, biodiversity, flora	The type of effects and associated issues described here will be considered when
	and fauna in a number of ways, depending on the measures to be included within the Plan and the methods of implementation. It should be considered whether the Plan will give rise to some or all of the impacts and effects listed below. This is not an exhaustive list and additional effects may arise that will need to be considered in the assessments required. - Permanent and/or temporary habitat loss - Permanent and/or temporary habitat fragmentation - Habitat deterioration - Vegetation or community changes (e.g. from land use change as well as direct changes to the environment, e.g. through emissions, fertilisation, lighting etc.) - Changes to soil nutrient status - Changes to physical structure of habitats (e.g. creeks and pans in salt meadows) - Disturbance or damage to breeding, roosting, feeding areas	undertaking the SEA.
	 Changes to distribution of species Introduction or expansion of barriers to movement, dispersal, migration Introduction or increase of collision risk Other impacts that may affect productivity and breeding success Changes to water quality, such as eutrophication, sedimentation etc. Changes to natural processes of sedimentation and erosion Changes to drainage, hydrology, hydromorphology, sub-surface flows, flooding regimes etc. 	
	 Changes to ecosystem services and functions, such as pollination, water attenuation and flood mitigation, climate change mitigation and adaption (such as carbon storage and sinks etc.) Introduction or spread of invasive species. Competent Authorities and consultants acting on their behalf are also advised to undertake reviews of peer-reviewed and grey literature to enhance their understanding of the implications for nature conservation of their proposed Plan/Programme and to ensure that they have identified the full range of potential effects that should be considered in the assessment. They are also advised to review the publications on the National Parks and Wildlife Service (NPWS) website for this purpose (details are provided below). 	
G	Scope of the Strategic Environmental Assessment: The Biodiversity, Flora and Fauna section and related sections (such as water, soil etc.) of the Environmental Report should be undertaken by or in conjunction with a suitably qualified ecologist(s) and other specialists as necessary, and in conjunction with the Natura Impact Statement (or Natura Impact Report, in the case of a land-use plan being prepared pursuant to the Planning and Development Acts). This will facilitate full integration of biodiversity issues and concerns, particularly in relation to nature conservation sites, protected species, and ecological corridors and stepping stones. The Environmental Protection Agency's (EPA's) Integrated Biodiversity Impact Assessment Practitioner's Manual is of particular relevance in this regard.	The biodiversity and related sections of the reports will be undertaken in conjunction with/informed by suitably qualified and experienced specialists, including ecologists. The SEA will be informed by an AA being undertaken for the Plan. The EPA's Integrated Biodiversity

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	The Environmental Report is required by the SEA Directive (2001/42/EC) to contain information on the environmental characteristics of the areas likely to be significantly affected by the Plan or Programme, or modification thereof.	Impact Assessment Practitioner's Manual will be taken into account by the SEA.
Н	Strategic Environmental Objectives: The Environmental Report is required to contain environmental protection objectives. For	These plans and programmes will be taken into account by the SEA process when
	biodiversity, flora and fauna, these should integrate with the objectives and obligations of other Directives, legislation, plans and policies such as, but not only, the following:	identifying the Strategic Environmental Objectives, as relevant.
	Birds and Habitats Directives,Water Framework Directive and the Floods Directive,	relevant.
	 Environmental Liabilities Directive Wildlife Acts, 1976-2018 European Communities (Birds and Natural Habitats) Regulations 2011 (SI 	
	477/2011) • and amendments (SI 290 of 2013, SI 499 of 2013 and SI 355 of 2015)	
	 European Union Biodiversity Strategy 2030 National Biodiversity Plan 2017-2021 National Peatlands Strategy 	
	All-Ireland Pollinator Plan 2015-2020. Strategic Environmental Objectives should be included for all nature conservation sites (not only European sites), protected species, and ecological corridors and stepping	
	stones as outlined in this submission (Appendix 1), and to address key threats arising from the Plan, such as the spread of invasive species.	
ı	Scope of Environmental Report Elements of biodiversity, flora and fauna of potential relevance to the SEA are set out in	Noted – the elements outlined in Appendix I of the submission will be considered
	Appendix 1. The scope of the SEA should include data gathering, analysis and assessment	when undertaking the SEA. The reference to the Flora
	of the implications for each of the elements listed, paying particular attention to the likely and realistic effects of the Plan. It is noted that Footnote 26 on page 6 of the Draft SEA Scoping Report provided	Protection Order contained in an earlier version of this SEA Scoping Report.
	references the Flora Protection Order of 1999. It should be noted that the list of plant species protected by Section 21 of the Wildlife Acts has been superseded by the Flora (Protection) Order 2015.	
	This legislation also gives legal protection to 65 species of bryophyte. For further details on	
	location of bryophytes in the County reference should be made to https://www.npws.ie/mapsand- data/flora-protection-order-map-viewer-bryophytes. The list of Flora Protection Order sites therefore needs to be re-evaluated within this Professional Country of the Protection Order sites therefore needs to be re-evaluated within this professional Country of the Protection Order sites therefore needs to be re-evaluated within this professional Country of the Protection Order sites therefore needs to be re-evaluated within this professional Country of the Protection Order sites therefore needs to be re-evaluated within this protection.	
J	Draft Report. Data/Information sources:	Noted – these
	NPWS website: The National Parks and Wildlife Service's website (www.npws.ie) is a key source of	data/information sources will be considered when
	data,	undertaking the SEA and AA.
	information and publications, including GIS datasets, on nature conservation sites and biodiversity issues of relevance to the Plan and its associated environmental	
	assessments. European sites:	
	With respect to European sites, the website presents amongst other things: - Maps of site boundaries, - Site synopses,	
	- Standard Data Forms,	
	- The qualifying interests (for Special Areas of Conservation (SACs)) and special conservation interests (for Special Protection Areas (SPAs)),	
	- The conservation objectives for the European sites. Conservation Objectives for European Sites:	
	Site-specific conservation objectives are available for a number of sites, with associated supporting documents and GIS datasets. The limitations of the data should be taken	
	into account in the assessment, as outlined under the "Notes/Guidelines". For all other	
	European sites, "generic" conservation objectives are available. Conservation objectives aim for the maintenance or restoration of the qualifying interests/special	
	conservation interests to favourable conservation condition at the site level. Natural Heritage Areas (NHAs): For NHAs, features of interest and dates of site designation are listed on the website:	
	For NHAs, features of interest and dates of site designation are listed on the website; site boundaries, site synopses, and Statutory Instruments (SIs) are also available.	
	bournainos, site syriopses, and statutory mistruments (313) are also available.	

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	Site Boundaries: Site boundaries of nature conservation sites may be subject to change, and additional information about sites, habitats and species will become available over time. The most up to-date data and information available from the website should be accessed and used at	
	each successive stage of the plan-making process. NPWS Datasets and Data Requests: GIS datasets are available for download for certain habitats and species arising from various sources, including national surveys3. Other NPWS-held data and reports on habitats, species and specific sites may be requested by submitting a "Data Request"	
	Form". Other Data Sources: Data and information on ecological interests and features in or near the Plan area are or may be available from other sources, including: • The National Biodiversity Data Centre (www.biodiversityireland.ie) • Non-governmental organisations such as BirdWatch Ireland, Bat	
	Conservation Ireland etc. Local Authorities (e.g. County or sub-County habitat maps, hedgerow surveys,	
	 Environmental Impact Statements and other assessments of plans and projects within the Plan area) Environmental Protection Agency (e.g. data and information on water quality 	
	 SEA Spatial Information Sources 2016). Important NPWS Publications NPWS publishes documents and reports on an ongoing basis and these are made available 	
	on the NPWS website. The Publications Section of the website should be used to identify key publications that are particularly relevant to the Plan in question and the impacts that may arise from it, and will assist in identifying and understanding current	
	environmental condition and problems in the receiving environment. These include conservation assessments, national species survey reports, monitoring reports for various habitats and species, threat response plans for species, national Red Lists and wildlife manuals relating	
	to the conservation management of habitats and species in Ireland. Particularly significant publications in this regard include the following: • 2007, 2013 and 2019 Report on the Status of EU Protected Habitats and Species	
	 (also known as the Article 17 Report) 2013 Article 12 (Birds Directive) Reports: Summary Report for the period 2008-2012 and Ireland's bird species' status and trends for the period 2008-2012. 2014 Ireland's Prioritised Action Framework (PAF) for the Implementation of 	
	the Birds and Habitats Directive. This framework, which has been approved by Government, identifies a range of actions needed to help improve the status of Ireland's habitats and wildlife. The possible sources of funding for these actions, across the various operational programmes, are also	
	identified. These include short, medium and long term actions, such as conservation management strategies, more focused Agri environment schemes and habitat restoration. Action 6.1.9 of Ireland's 3rd National Biodiversity Action Plan is to "Review and update the Prioritised Action Framework for Natura 2000". This process is underway.	
K	SEA Guidance: Competent authorities and agents/consultants acting on their behalf are advised to have regard to the following Guidance. It is also advisable to take account of any European or national jurisprudence that supersedes any guidance within these documents. Please refer to the EPA's website for a more complete and up-to-date list of relevant SEA guidance	Noted the SEA guidance and any superseding legal issues will be considered when undertaking the SEA.
	http://www.epa.ie/monitoringassessment/assessment/sea/resources/ EPA, 2020. Good practice guidance on Cumulative Effects Assessment in SEA - EPA, 2020. Guidance on SEA Statements and Monitoring - EPA, 2020. SEA of Local Authority Land Use Plans - EPA Recommendations and Resources	
	 EPA, 2019. Integrating Climate Change into Strategic Environmental Assessment in Ireland - A Guidance Note. EPA, 2016. Scoping Guidance Document. 	

No.	Submission text	Response
	- EPA, 2015. Developing and Assessing Alternatives in Strategic Environmental Assessment - EPA 2013. Integrated Biodiversity Impact Assessment Practitioner's Manual	
L	SEA Monitoring: The monitoring programme should be clearly set out and developed in such a manner as to ensure it will identify the effects (both positive and negative) on the environment that are likely to arise, or will arise, and to monitor the effectiveness of any mitigation, if required, on which the assessment relies. While it may be considered efficient to use monitoring programmes that are already in place and run by other authorities, it is important to establish that these are in fact designed in such a way that they will identify the effects anticipated from the particular Plan in question. As such, it is important to understand the objectives, methodologies, parameters, assumptions etc. of any existing monitoring programme that is proposed to be used in such a way. It is advisable to clearly set out where responsibilities for monitoring programmes lie, their frequency, their reporting/publication arrangements, as well as the procedures that will be put in place to ensure that there is a response mechanism to any unforeseen or undesirable negative effects/results and an undertaking of remedial action, if necessary.	Noted – these issues will be considered when preparing the monitoring programme as part of the SEA.
М	Key requirements and clarifications concerning Natura Impact Statements and Appendix I: Key elements of biodiversity	Noted – the elements of biodiversity identified will be considered when undertaking the SEA.
N	Appropriate Assessment Guidance Public Authorities and agents/consultants acting on their behalf are advised to have regard to the following Guidance. • Department of Environment, Heritage and Local Government. 2010. Appropriate assessment of plans and projects in Ireland: Guidance for planning authorities. This is accessible at https://www.npws.ie/sites/default/files/publications/pdf/NPWS_2009_AA_Gu idance.pdf • European Commission, 2011. Wind energy developments and Natura 2000 • European Commission, 2011. The Implementation of the Birds and Habitats Directives in estuaries and coastal zones with particular attention to port development and dredging European Commission (2018) Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive92/43/EEC • European Commission, 2001. Methodological guidance on the provisions of Article 6 (3) and (4) of the Habitats Directive 92/43/EEC. More guidance documents from the European Commission may become available at: http://ec.europa.eu/environment/nature/natura2000/management/guidance_en.htm It is also advisable to take account of any European or national jurisprudence that supersedes any guidance within these documents. Information relating to every case brought before the European Court of Justice and the Court of First Instance since 1953 can be found at: (access to the case-law by case number): https://curia.europa.eu/jcms/jcms/Jo1_6308/ The following publications also provide useful information on relevant cases: • European Court of Justice; • Ecosystems Ltd, 2014. Article 6 of the Habitats Directive: Rulings of the European Court of Justice. Both are accessible at http://ec.europa.eu/environment/nature/legislation/caselaw/index_en.htm as of July 2016.	The SEA will be informed by an AA. The AA guidance identified will be considered when undertaking the AA.

3.3 Submissions on the Environmental Report for the Draft Plan

Various submissions were made on the Draft Plan and/or associated environmental assessment documents while these documents were on public display. Certain submissions resulted in updates being made to the Plan.

The most significant changes relating to the Plan following public display of the Draft included adopting a more compact form of land use zoning and removal of inappropriate land use zoning objectives from lands at elevated of flood risk.

Updates made on foot of submissions include:

- In the SFRA, to provide a finer granularity to the Justification Tests provided on Table 5 of the SFRA report, including identifying both the lands in question and the five points under Criterion no. 2
- In the SFRA, to replace "CFRAM studies are being undertaken for each of the six river basin districts in Ireland" with "The National CFRAM programme was completed in 2018".
- In the SFRA, to update the reference to <u>www.cfram.ie</u> to <u>www.floodinfo.ie</u>
- In the SFRA, to include ICPSS mapping separately in the list of flood zone data.
- In the SFRA, to include a description of the historical and predictive groundwater mapping in the SFRA and to provide a reference to this mapping in the Plan
- In the SFRA, to update the reference to www.floodmaps.ie to www.floodinfo.ie
- In the SFRA, to insert the following text into the SFRA under a new subsection titled "Sustainable Urban Drainage Systems":

"As provided for by Policy Objective FL 8, all new developments should be adequately serviced with surface water drainage infrastructure and promote the use of Sustainable Drainage Systems. Surface water runoff from development sites will be limited to pre-development levels and planning applications for new developments will be required to provide details of surface water drainage and sustainable drainage systems proposals.

As provided for by DM Standard 68, "Sustainable Drainage Systems (SuDS)", all new developments (including amendments / extensions to existing developments) will be required to incorporate 'Sustainable Urban Drainage Systems' (SuDS) as part of the development/design proposals. SuDS are effective technologies, which aim to reduce flood risk, improve water quality and enhance biodiversity and amenity. The systems should aim to mimic the natural drainage of the application site to minimise the effect of a development on flooding and pollution of existing waterways.

SuDS include devices such as swales, permeable pavements, filter drains, storage ponds, constructed wetlands, soakways and green roofs. In some exceptional cases, and at the discretion of the Council, where it is demonstrated that SuDS devices are not feasible, approval may be given to install underground attenuation tanks or enlarged pipes in conjunction with other devices to achieve the required water quality.

Such alternative measures will only be considered as a last resort. Proposals for surface water attenuation systems should include maintenance proposals and procedures.

Development proposals will be required to be accompanied by a comprehensive SuDS assessment that addresses run-off rate, run-off quality and its impact on the existing habitat and water quality.

This approach using SuDS offers a total solution to rainwater management and is applicable in both urban and rural situations. Current best practice guidance on SuDS is available from the Guidance Documents produced by the Greater Dublin Strategic Drainage Study (GDSDS)."

- In the AA, to include all SSCO references for the European sites identified.
- In the Plan, to update the wording of Policy Objective FL 8 "Flood Risk Assessment for Planning Applications and CFRAMS" to take account of flood risk management concerns
- In the Plan, to clarify on the Maigh Cuilinn Land Use Zoning Map (and at other parts of the Plan as relevant) that: The "N59 Moycullen Bypass" area shown on the Land Use Zoning map represents the boundary of a permitted development and does not represent a Land Use Zoning Objective.
- In the Plan, to add a provision requiring that in addition to the County Plan SFRA datasets (including the Flood Zones, CFRAMS mapping, historical and predictive groundwater mapping and historical flood risk indicator mapping, such as the Benefitting Lands mapping), new and

emerging datasets (such as the OPW's National Fluvial Mapping that will supersede existing PFRA fluvial mapping for catchments greater than 5km²) must be consulted by prospective applicants for developments and will be made available to lower-tier Development Management processes in the Council.

- In the Plan, to add a provision requiring that the OPW must be consulted with in relation to proposed developments in the vicinity of drainage channels and rivers for which the OPW are responsible, and retain a strip on either side of such channels where required, to facilitate maintenance access thereto. In addition, require promotion of the sustainable management and uses of water bodies and avoidance of culverting or realignment of these features.
- In the Plan, to integrate the following flood risk management text into relevant parts of the Plan:
 - Where only a small proportion of a site is at risk of flooding, the sequential approach shall be applied in site planning, in order to seek to ensure that no encroachment onto or loss of the flood plain occurs and/or that only water compatible development such as Open Space would be permitted for the lands which are identified as being at risk of flooding within that site.
 - Applications for developments in coastal areas and associated assessments shall also consider wave overtopping and coastal erosion.
 - Climate change scenario mapping of relevant datasets, such those under the OPW's CFRAMS, must be used where relevant.
 - With regard to Land Use Zoning Objectives, such as Open Space, Tourism and Community Infrastructure, provided for on lands that are within the Constrained Land Use Objective zone, Permissible Uses shall be constrained to those water compatible and less vulnerable uses as relevant to the particular Flood Zone (please refer to the accompanying SFRA and DM Standard 69).
 - The extent of the 'Constrained Land Use' zone is shown with a hatching corresponding to the extent of flood zones A and B which are overlain on the Land Use Zoning Objective underneath. Where such flood risk extents correspond with undeveloped lands, an appropriate land use zoning objective which would not facilitate the development of classes of development vulnerable to the effects of flooding has been identified such as 'Open Space' or 'Agriculture'.
 - The 'Constrained Land Use' zone extends to previously developed lands in a number of settlements which could include lands in the centre of towns and villages. In other incidences, the actual buildings may be located outside of areas identified as being at risk of flooding but the curtilage of the property to the rear may be located at a lower level falling towards a waterbody and identified as being located within Flood Zone A and / or B. The 'Constrained Land'

Use zone overlain on the Land Use Zoning Objectives generally restricts development vulnerable to the effects of flooding being permitted while recognising that existing development uses may require small scale additional development that would contribute towards the compact and sustainable urban development of the individual town/village. Where proposals for such developments submitted to the Planning Authority relate to existing or developed areas, the buildings sequential approach cannot be used to locate them in lower-risk areas and the Justification Test will not apply.

- Proposals seeking to change the use of existing buildings from a less vulnerable use to a more vulnerable use to the effects of flooding will not normally be considered acceptable to the Planning Authority whilst some change of use proposals not increasing the vulnerability to the effects of flooding or small scale extensions to such buildings will be considered on their individual merits but are acceptable in principle.
- An existing dwelling or building that is not located within an area at risk of flooding but has a large rear garden / curtilage that is located within Flood Zone A or B would not be suitable for a more in-depth residential development proposal which would propose a residential use within a designated constrained land use area.
- Development proposals within this zone shall be accompanied by a detailed Flood Risk Assessment, carried out in accordance with The Planning System and Flood Risk Assessment Guidelines and Circular PL 2/2014 (or as updated), which shall assess the risks of flooding associated with the proposed development.
- Proposals shall only be considered where it is demonstrated to the satisfaction of the Planning Authority that they would not have adverse impacts or impede access to a watercourse, floodplain or flood protection and management facilities, or increase the risk of flooding to other locations. The nature and design of structural and non-structural flood risk management measures required for development in such areas will also be required to be demonstrated, to ensure that flood hazard and risk will not be increased. Measures proposed shall follow best practice in the management of health and safety for users and residents of the development.
- Specifications for developments in flood vulnerable areas set out in this plan shall be complied with as appropriate. (Please refer also to Development Management Standard 69).

For further information on how submissions were considered, refer to the Chief Executive's Report on submissions received on the Draft Plan and associated documents and the Chief Executive's Report on submissions received on

the Proposed Material Alterations and associated documentation – both available at https://consult.galway.ie/.

As detailed under Section 2.2 of this SEA Statement, the Plan, considered as a whole, contributes towards environmental protection management and sustainable and development and complies with various legislative requirements. This is identified throughout the SEA documentation. Various Plan provisions that would contribute towards the sustainable development of the County would, at the same time, have the potential to conflict with the environment, were mitigation measures not taken into account. This is normal and mitigation measures have been integrated into the Plan to deal with these potential effects. However, a number of alterations were adopted by the Elected Members as part of the Plan that are particularly internally inconsistent with the overall approach provided for by the Plan, including those which are identified in Section 2.2 and were advised against by the Planpreparation/SEA process.

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, having integrated various recommendations arising from the SEA, AA and SFRA processes. Responses to submissions made during the period of public display of a Draft Plan were integrated into a Chief Executive's Report and considered by Galway County Council.

A number of material alterations were proposed after public display of the Draft Plan. The Proposed Material Alterations were subject to Screening for SEA and AA and a selection of Alterations were subject to SEA and Stage 2 AA.

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 all changes that were made to the

original Draft Plan that was placed on public display.

Section 4 Summary of Alternatives considered

4.1 Introduction

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

Whether or not alternatives for the County Development Plan are available has been identified by Galway County Council.

4.2 Limitations in Available Alternatives

The Plan is required to be prepared by the Planning and Development Act 2000 (as amended), which specifies various types of objectives that must be provided for by the Plan. The alternatives available for the Plan are limited by the provisions of higher-level planning objectives, including those of the National Planning Framework (NPF) and the Regional Spatial and Economic Strategy (RSES) for the Northern and Western Region. These documents set out various requirements for the content of the Plan including on topics such as settlement typology, land use zoning and the sustainable development of rural areas.

4.3 Assessment of Tier 1: Alternatives for Positioning under the Settlement Hierarchy

Type 1 (i) Alternatives for Gort and Loughrea

- Alternative A: Designate Gort and Loughrea as Self Sustaining Growth Towns
- Alternative B: Designate Loughrea only as a Self Sustaining Town

Both Gort and Loughrea are towns which display numerous attributes including a good level of jobs and services for both resident population but also a wider catchment area, a broad range of services and facilities and good transport links with motorways within proximity. They have the capacity for continued commensurate growth in terms of population and employment and to become more self-sustaining. Both towns have opportunities to accommodate compact growth within their development envelopes in accordance with national and regional policy.

By facilitating population and employment growth commensurate to the attributes of Gort and Loughrea, **Alternative A** would provide for a more sustainable Settlement Hierarchy and a greater level of sustainable development at a County level. Alternative A would help to facilitate a more compact form of development at these settlements that would help to maximise benefits from the infrastructural investment and to the wider network of villages surrounding these towns Alternative A would not increase pressure in lower-level settlements, which are generally less well-serviced and less-well connected, and the open countryside— and would, as a result, avoid potential adverse significant effects on various environmental components.

By limiting population growth in the two towns, **Alternative B** would fail to provide viable alternatives to the large towns of Athenry and the Key Town of Ballinasloe as a place to live and work and would result in increased pressure in the lower-level settlements and the open countryside. It would also militate against the future compact growth of the settlements. As a result, Alternative B would be likely to result in a greater extent of significant effects on various environmental components and would not be as sustainable as Alternative A.

Type 1 (ii) Alternatives for Portumna and Headford

- Alternative A: Designate Headford and Portumna as a Small Growth Town
- Alternative B: Designate Portumna and Headford as Self-Sustaining Towns

Alternative A would focus on localised sustainable growth and employment related development that would strengthen and support the local base of Headford and Portumna. It would also provide a realistic and suitable alternative to one off housing in the countryside. By facilitating population and employment growth commensurate to its attributes, Alternative A would provide for a more sustainable Settlement Hierarchy and a greater level of sustainable development at a County level and at a town level in Headford and Portumna.

Alternative A would result in a lower number of car journeys, supporting efforts to improve sustainable mobility and meet greenhouse gas emission reduction targets. This alternative would help to facilitate a more compact form of development at these settlements that would help to maximise benefits from infrastructural investment. Alternative A would provide for higher levels of brownfield and infill development (and associated adverse environmental effects) in better serviced, better connected and more sensitive locations. This type of development would result in less potential environmental impacts, including on water, drinking water, human health, ecology and landscape designations.

Alternative B would not be line with the two settlements of Gort and Loughrea identified as self-sustaining towns. The settlements of Headford and Portumna would not have the same level of services and employment base which would result in increased populations for these towns, but the employment opportunities would not be present.

A greater level of sprawl and higher dependence on outbound commuting for employment means that Alternative B would be likely to result in a greater extent of significant effects on various environmental components and would not be as sustainable as Alternative A. Alternative B would result in a higher number of car journeys, conflicting with efforts to improve sustainable mobility and meet greenhouse gas emission reduction targets. The greater degree of sprawl would reduce efficiencies with regard to infrastructural investment. This alternative would provide for higher levels of greenfield development (and associated adverse environmental effects) in less well-serviced, less-well connected and more sensitive locations surrounding these settlements. This type of development would result in a higher adverse environmental impact, including effects on water, drinking water, human health, ecology and landscape designations.

Type 1 (iii) Alternatives for Rural Settlements and Rural Area

- **Alternative A**: Designate the Rural Settlements within this level (7) dispersed throughout the county to meet rural generated housing needs.
- **Alternative B**: Do not designate the Rural Settlements, settlements to remain in Open Countryside

The settlements are primarily residential in nature. Some of the villages in the rural settlements are served by public mains water and/or wastewater supply, whilst there are others that are unserviced. The purpose of these settlements is to provide an alternative to rural housing within a low-density environment.

Alternative A, by providing focus to and targeted policy objectives for the Rural Villages, would facilitate a viable alternative to one-off housing in the open countryside. Development within these settlements would be more likely to be served by infrastructure (including water services infrastructure) and more likely to protect the environment including the status of ground and surface waters, water used for drinking water, human health, biodiversity and flora and fauna and the landscape. Development would be required to be subject to siting, design, protection of residential amenities and normal development management criteria, subject to the satisfactory provision of infrastructure and services and in keeping with the character of the settlement.

Alternative B, by not providing a focus to and targeted policy objectives for Rural Villages would be less likely to provide a viable alternative to one-off housing in the open countryside. Development within the open countryside would be less likely to be served by infrastructure (including water services infrastructure) and less likely to protect the environment including the status of ground and surface waters, water used for drinking water, human health, biodiversity and flora and fauna and the landscape. Alternative B would the least sustainable of these two alternatives and would be most harmful to the environment.

4.4 Assessment of Type 2: Alternatives for Population Allocations

- Type 2 Alternative A: Allocate significant population allocation to the settlements in Level 1, 2 and 3 of the settlement hierarchy, with limited growth in Level 4, 5 and 6 and minimal growth identified in Level 7
- Type 2 Alternative B: Continued Growth of the MASP and Key Towns and dispersed pattern of growth across the other settlements and open countryside

The concentration of growth in the larger settlements in the County (i.e. MASP, Ballinasloe, Tuam and Athenry) under **Alternative A** will ensure there are settlements suitably located in the County with the capacity to grow at a sustainable level where there are opportunities to consolidate development in the existing urban footprint through infill and brownfield development. These settlements have a number of positive attributes including a broad range of services, transport links, a strong employment base, and capacity to facilitate population and economic growth. By providing for a concentration in the larger settlements in the County, Alternative A would result in lower levels of commuting, benefiting efforts to improve sustainable mobility and meet greenhouse gas emission reduction targets the most. Development in these centres would be better serviced and there would be a reduced need for greenfield development (and associated adverse environmental effects, including effects on water, drinking water, human health, ecology and landscape designations) in less well-serviced, less-well connected and more sensitive locations in the County, including the open countryside and smaller settlements as identified in Levels 4-6.

A more dispersed pattern of development as identified in **Alternative B** that would result in the expansion of the smaller towns and villages in the County. Development is more likely to be on greenfield lands as there are few infill and brownfield sites available. Services and public transport are more limited and there would be a greater dependence on commuting for employment. Development would be more likely to occur on greenfield lands as there are less infill and brownfield sites available in Rural Settlements and the Open Countryside. Greenfield development (and associated adverse environmental effects, including effects on water, drinking water, human health, ecology and landscape designations) would be in less well-serviced, less-well connected and more sensitive locations in the County, including the open countryside and smaller settlements. The more dispersed population approach has the potential to undermine the role of the larger settlements and make it more difficult to deliver key infrastructure and placemaking projects.

4.5 Assessment of Type 3: Alternatives for Rural Areas

- Type 3 (i) Alternative A: Designate Rural Areas under Strong Urban Pressure that require various criteria to be demonstrated in advance of planning permission being granted for a single dwelling for permanent occupation.
- Type 3 (i) Alternative B: Do not designate Rural Areas under Strong Urban Pressure and assess each planning application on its merits.

Alternative A provides for a robust and transparent policy approach to manage rural housing.

Restricting the development of single dwellings in rural areas that are under strong urban influence/pressure would positively impact upon the protection and management of the environment and sustainable development. The restrictions would help to both reduce levels of greenfield development in areas immediately surrounding existing centres and encourage brownfield development within existing centres.

Single dwellings in rural areas would be facilitated as appropriate and urban development would be directed towards established settlements. This alternative would help to prevent low density urban sprawl and associated adverse effects upon sustainable mobility, climate emission reduction targets and various environmental components.

Alternative B Provides a vague and unclear policy approach to rural housing and risks facilitating a significant increase in urban-generated one-off housing in the open countryside which will undermine the role of small towns and villages and have consequences for the environment.

Not restricting the development of single dwellings in rural areas that are under strong urban influence/pressure would adversely impact upon the protection and management of the environment and sustainable development. The absence of restrictions would result in increased levels of greenfield development in areas immediately surrounding existing centres and less demand for brownfield development within existing centres.

Urban generated housing development would occur within rural areas outside of established settlements. This alternative would result in low density urban sprawl and associated adverse effects upon sustainable mobility, climate emission reduction targets and various environmental components.

4.6 Assessment of Type 4: Alternatives for Land Use Zoning

Alternatives for Land Use Zoning are assessed on Table 4.1.

Table 4.1 Assessment of Type 4 Alternatives against Strategic Environmental Objectives

Town	Alternative	Commentary
TOWIT	(selected alternatives in bold)	Confinentary
Bearna	Open Space would be an appropriate use for these lands and would be to be in compliance with the Flood Risk Management Guidelines. New Residential lands could be zoned elsewhere in the settlement on lands with low levels of flood risk. Such residential development would reduce the need for development elsewhere in the County, on less well-serviced, less-well connected, more sensitive lands – and associated adverse environmental effects.	
	B New Residential Zoning: South of R336 zoned, all lands (within Flood Zone A) zoned as TC/Infill Residential	New Residential would be an inappropriate use for these lands and would be unlikely to be in compliance with the Flood Risk Management Guidelines. Due to the elevated flood risk, the development of this site would be hindered and development pressures may present elsewhere in the County, on less well-serviced, less-well connected, more sensitive lands – and associated adverse environmental effects.
Oranmore Set 1	A Lands (within Flood Zone A) zoned Open Space/Recreation and Amenity B Lands (within Flood Zone A) zoned Residential Phase 1	Open Space would be an appropriate use for these lands and would be to be in compliance with the Flood Risk Management Guidelines. New Residential lands could be zoned elsewhere in the settlement on lands with low levels of flood risk. Such residential development would reduce the need for development elsewhere in the County, on less well-serviced, less-well connected, more sensitive lands – and associated adverse environmental effects. New Residential would be an inappropriate use for these lands and would be unlikely to be in compliance with the Flood Risk Management Guidelines. Due to the elevated flood risk, the development of this site would be hindered and development pressures may present elsewhere in the County, on less well-serviced, less-well connected, more sensitive lands – and associated adverse
Oranmore Set 2	A Lands to the south of the Plan area zoned Residential Phase 2	environmental effects. By not consolidating land use zoning and including unnecessary land use zoning, this alternative would provide for a less compact form of development that would fail to maximise benefits from infrastructural investment. By facilitating the unnecessary sprawl of the settlement and failing to consolidate zoning, this alternative would decrease the likelihood of brownfield development and conflict with efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Providing for unnecessary zoning would be likely to result in higher levels of sprawl

Town	Alternative	Commentary		
	(selected alternatives in bold)			
	B Lands to the south of the Plan area removed from Plan boundary	and associated avoidable potential adverse environmental effects. By consolidating land use zoning and reducing unnecessary land use zoning this alternative would provide for a more compact form of development that would help to maximise benefits from infrastructural investment. By consolidating the zoning and helping to avoid unnecessary sprawl of the settlement, this alternative would increase the likelihood of brownfield development and contribute towards efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Reducing unnecessary zoning would help to minimise sprawl and would avoid potential adverse environmental effects that would otherwise occur - this would benefit the protection of multiple environmental components.		
Baile Chláir	A Lands to the West of the Plan boundary zoned Residential Phase 2	There are various other alternative lands for residential development that would contribute more to the proper planning of the town. Residential zoning on these lands would be unnecessary and there would be a need to provide for tourism zoning elsewhere. This alternative would provide for a less compact form of development that would fail to maximise benefits from infrastructural investment. By facilitating the unnecessary sprawl of the settlement and failing to consolidate zoning, this alternative would decrease the likelihood of brownfield development and conflict with efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Providing for unnecessary Residential zoning would be likely to result in higher levels of sprawl and associated avoidable potential adverse environmental effects.		
	B Lands to the West of the Plan boundary zoned Community Facilities	There is an identified planning need for community facilities development in Baile Chláir. Providing for this use within the settlement boundary would help to minimise the occurrence of this type of development outside of the town, potentially on less well-connected, less well-served lands — with associated potential adverse environmental effects on environmental components such as water, drinking water, human health, ecology and landscape designations. This alternative would provide for a more compact form of development that would help to maximise benefits from infrastructural investment and it would contribute towards efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health).		
Briarhill	A. To prepare a Framework Plan for Briarhill for integration into the County Development Plan that is centred around the principles of good placemaking and provides for phased development at this key strategic growth area.	The preparation of a Framework Plan for Briarhill for integration into the County Development Plan that is centred around the principles of good placemaking and provides for phased development at this key strategic growth area would benefit proper planning, sustainable development and environmental protection and management. Such a Framework Plan would make development at this location, which has proximity to services, jobs and infrastructure and is well-serviced and well-connected, more likely. Development at Briarhill would reduce the need to develop lands that are less well-serviced and connected and potentially more sensitive. A focus on placemaking would make Briarhill a more desirable location to live and work. Phasing would help to both maximise benefits from infrastructural investment and ensure that new development is accompanied by appropriate infrastructure and services.		
	B. Not preparing any focused Plan or land use zoning for Briarhill.	Not preparing any focused Plan or land use zoning for Briarhill would stymie proper planning, sustainable development and environmental protection and management. The absence of a coordinated Plan for Briarhill would make development at this location, which has proximity to services, jobs and infrastructure and is well-serviced and well-connected, less likely. In the absence of a Framework Plan, there would be a greater need to develop lands elsewhere that are less well-serviced and connected and potentially more sensitive. The absence of phasing would make both maximising benefits from infrastructural investment and ensuring that new development is accompanied by appropriate infrastructure and services more difficult.		
Garraun	A. To prepare a Framework Plan for Garraun for integration into the County Development Plan that is centred around the principles of good placemaking and provides for phased development at this key strategic growth area.	The preparation of a Framework Plan for Garraun for integration into the County Development Plan that is centred around the principles of good placemaking and provides for phased development at this key strategic growth area would benefit proper planning, sustainable development and environmental protection and management. Such a Framework Plan would make development at this location, which has proximity to services, jobs and infrastructure and is well-serviced and well-connected, more likely. Development at Garraun would reduce the need to develop lands that are less well-serviced and connected and potentially more sensitive. A focus on placemaking would make Garraun a more desirable location to live and work. Phasing would help to both maximise benefits from infrastructural investment and ensure that new development is accompanied by appropriate infrastructure and services.		
	B. Zoning Garraun generally as a reserve area, potentially to be developed under future Plan periods, post 2028.	Not preparing any focused Plan or land use zoning for Garraun would stymie proper planning, sustainable development and environmental protection and management. The zoning of Garraun generally as a reserve area, potentially to be developed under future Plan periods, post 2028, would make development at this location, which has proximity to services, jobs and infrastructure and is well-serviced and well-connected, less likely. In the absence of a Framework Plan, there would be a greater need to develop lands elsewhere that are less well-serviced and connected and potentially more sensitive. The absence of phasing would make both maximising benefits from infrastructural investment and ensuring that new development is accompanied by appropriate infrastructure and services more difficult.		

Town	Alternative	Commentary
	(selected alternatives in bold)	
Clifden Set 1	A New Residential Zoning: Residential Phase 2 lands removed to the north of the Galway Clifden Road, boundary reduced B New Residential	By consolidating land use zoning and reducing unnecessary land use zoning this alternative would provide for a more compact form of development that would help to maximise benefits from infrastructural investment. By consolidating the zoning and helping to avoid unnecessary sprawl of the settlement, this alternative would increase the likelihood of brownfield development and contribute towards efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Reducing unnecessary zoning would help to minimise sprawl and would avoid potential adverse environmental effects that would otherwise occur - this would benefit the protection of multiple environmental components. By not consolidating land use zoning and including unnecessary land use zoning, this alternative
	Zoning: Residential Lands Phase 2 lands zoned north of the Clifden Galway Road	would provide for a less compact form of development that would fail to maximise benefits from infrastructural investment. By facilitating the unnecessary sprawl of the settlement and failing to consolidate zoning, this alternative would decrease the likelihood of brownfield development and conflict with efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Providing for unnecessary zoning would be likely to result in higher levels of sprawl and associated avoidable potential adverse environmental effects.
Clifden Set 2	A To the north of Clifden Glen Lands zoned to Tourism from Residential Phase 2.	There is an identified planning need for tourism development in Clifden. Providing for this use within the settlement boundary would help to minimise the occurrence of this type of development outside of the town, potentially on less well-connected, less well-served lands — with associated potential adverse environmental effects on environmental components such as water, drinking water, human health, ecology and landscape designations. This alternative would provide for a more compact form of development that would help to maximise benefits from infrastructural investment and it would contribute towards efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health).
	B To the north of Clifden Glen Lands zoned to Residential Phase 2.	There are various other alternative lands for residential development that would contribute more to the proper planning of the town. Residential zoning on these lands would be unnecessary and there would be a need to provide for tourism zoning elsewhere. This alternative would provide for a less compact form of development that would fail to maximise benefits from infrastructural investment. By facilitating the unnecessary sprawl of the settlement and failing to consolidate zoning, this alternative would decrease the likelihood of brownfield development and conflict with efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Providing for unnecessary Residential zoning would be likely to result in higher levels of sprawl and associated avoidable potential adverse environmental effects.
Maigh Cuilinn	A Lands to the east of the N59 approach into Maigh Cuilinn zoned Agriculture	Agricultural zoning would be compatible with the topography of these lands. Residential zoning allocated to the town could be provided for elsewhere within the town, contributing towards a more compact form of development that would help to maximise benefits from infrastructural investment. This alternative would increase the likelihood of brownfield development and contribute towards efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Reducing the need to develop lands elsewhere, outside of the settlement, for residential uses would help to minimise sprawl and would avoid potential adverse environmental effects that would otherwise occur - this would benefit the protection of multiple environmental components.
	B Lands to the east of the N59 approach into Maigh Cuilinn zoned Residential Phase 2	Land topography is a physical constraint to the development of these lands. Allocating some of Maigh Cuilinn's allotted residential zoning to these lands would be likely to place greater pressure on lands outside of the settlement for residential development, potentially on less well-connected, less well-served lands – with associated potential adverse environmental effects on environmental components such as water, drinking water, human health, ecology and landscape designations. Lands developed outside of the settlement would be likely to result in inefficiencies infrastructural investment and higher emissions from transport (with associated effects on energy, air, noise and human health).
Headford	A Lands to the north of Headford Village removed from Plan boundary	By consolidating land use zoning and reducing unnecessary land use zoning this alternative would provide for a more compact form of development that would help to maximise benefits from infrastructural investment. By consolidating the zoning and helping to avoid unnecessary sprawl of the settlement, this alternative would increase the likelihood of brownfield development and contribute towards efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Reducing unnecessary zoning would help to minimise sprawl and would avoid potential adverse environmental effects that would otherwise occur - this would benefit the protection of multiple environmental components.
	B Lands to the north of Headford village zoned Residential Phase 2	By not consolidating land use zoning and including unnecessary land use zoning, this alternative would provide for a less compact form of development that would fail to maximise benefits from infrastructural investment. By facilitating the unnecessary sprawl of the settlement and failing to consolidate zoning, this alternative would decrease the likelihood of brownfield development and conflict with efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Providing for unnecessary zoning would be likely to result in higher levels of sprawl and associated avoidable potential adverse environmental effects.
Oughterard	A Lands zoned with excess Residential Lands(2005 2011) Plan to the West of Plan boundary	By not consolidating land use zoning and including unnecessary land use zoning, this alternative would provide for a less compact form of development that would fail to maximise benefits from infrastructural investment. By facilitating the unnecessary sprawl of the settlement and failing to consolidate zoning, this alternative would decrease the likelihood of brownfield development and conflict with efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Providing for unnecessary zoning would be likely to result in higher levels of sprawl and associated avoidable potential adverse environmental effects.
	B More compact residential zoning	By consolidating land use zoning and reducing unnecessary land use zoning this alternative would provide for a more compact form of development that would help to maximise benefits from infrastructural investment. By consolidating the zoning and helping to avoid unnecessary sprawl of the settlement, this alternative would increase the likelihood of brownfield development and contribute towards efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Reducing unnecessary zoning would help to minimise sprawl and would avoid potential adverse environmental effects that would otherwise occur - this would benefit the protection

Town	Alternative	Commentary
	(selected alternatives in bold)	
		of multiple environmental components.
Portumna Set 1	A Lands to the west of the N65 zoned Residential Phase 2	By consolidating land use zoning and reducing unnecessary land use zoning this alternative would provide for a more compact form of development that would help to maximise benefits from infrastructural investment. By consolidating the zoning and helping to avoid unnecessary sprawl of the settlement, this alternative would increase the likelihood of brownfield development and contribute towards efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Reducing unnecessary zoning would help to minimise sprawl and would avoid potential adverse environmental effects that would otherwise occur - this would benefit the protection of multiple environmental components.
	B Lands to the west of the N65 town zoned Phase 1	By not consolidating land use zoning and including unnecessary land use zoning, this alternative would provide for a less compact form of development that would fail to maximise benefits from infrastructural investment. By facilitating the unnecessary sprawl of the settlement and failing to consolidate zoning, this alternative would decrease the likelihood of brownfield development and conflict with efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Providing for unnecessary zoning would be likely to result in higher levels of sprawl and associated avoidable potential adverse environmental effects.
Portumna Set 2	A Lands to the west of Portumna town on the R352 zoned Tourism	By not consolidating land use zoning and including unnecessary land use zoning, this alternative would provide for a less compact form of development that would fail to maximise benefits from infrastructural investment. By facilitating the unnecessary sprawl of the settlement and failing to consolidate zoning, this alternative would decrease the likelihood of brownfield development and conflict with efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Providing for unnecessary zoning would be likely to result in higher levels of sprawl and associated avoidable potential adverse environmental effects.
	B Lands to the west of Portumna town on the R352 removed from Plan boundary	By consolidating land use zoning and reducing unnecessary land use zoning this alternative would provide for a more compact form of development that would help to maximise benefits from infrastructural investment. By consolidating the zoning and helping to avoid unnecessary sprawl of the settlement, this alternative would increase the likelihood of brownfield development and contribute towards efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Reducing unnecessary zoning would help to minimise sprawl and would avoid potential adverse environmental effects that would otherwise occur - this would benefit the protection of multiple environmental components.
An Cheathrú Rua	A Consolidation of Plan boundary- Residential Phase 2 lands removed west of the village	By consolidating land use zoning and reducing unnecessary land use zoning this alternative would provide for a more compact form of development that would help to maximise benefits from infrastructural investment. By consolidating the zoning and helping to avoid unnecessary sprawl of the settlement, this alternative would increase the likelihood of brownfield development and contribute towards efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Reducing unnecessary zoning would help to minimise sprawl and would avoid potential adverse environmental effects that would otherwise occur - this would benefit the protection of multiple environmental components.
	B Residential Phase 2 lands zoned to the west of the village	By not consolidating land use zoning and including unnecessary land use zoning, this alternative would provide for a less compact form of development that would fail to maximise benefits from infrastructural investment. By facilitating the unnecessary sprawl of the settlement and failing to consolidate zoning, this alternative would decrease the likelihood of brownfield development and conflict with efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Providing for unnecessary zoning would be likely to result in higher levels of sprawl and associated avoidable potential adverse environmental effects.
An Spidéal	A Consolidation of Plan boundary- Residential Phase 2 lands removed north of the village	By consolidating land use zoning and reducing unnecessary land use zoning this alternative would provide for a more compact form of development that would help to maximise benefits from infrastructural investment. By consolidating the zoning and helping to avoid unnecessary sprawl of the settlement, this alternative would increase the likelihood of brownfield development and contribute towards efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Reducing unnecessary zoning would help to minimise sprawl and would avoid potential adverse environmental effects that would otherwise occur - this would benefit the protection of multiple environmental components.
	B Residential Phase 2 lands zoned to the north of the village	By not consolidating land use zoning and including unnecessary land use zoning, this alternative would provide for a less compact form of development that would fail to maximise benefits from infrastructural investment. By facilitating the unnecessary sprawl of the settlement and failing to consolidate zoning, this alternative would decrease the likelihood of brownfield development and conflict with efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Providing for unnecessary zoning would be likely to result in higher levels of sprawl and associated avoidable potential adverse environmental effects.
Ballygar	A Lands to the East of Ballygar Village zoned Residential Phase 1	By consolidating land use zoning and reducing unnecessary land use zoning this alternative would provide for a more compact form of development that would help to maximise benefits from infrastructural investment. By consolidating the zoning and helping to avoid unnecessary sprawl of the settlement, this alternative would increase the likelihood of brownfield development and contribute towards efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Reducing unnecessary zoning would help to minimise sprawl and would avoid potential adverse environmental effects that would otherwise occur - this would benefit the protection of multiple environmental components.
	B Lands to the East of Ballygar village zoned Residential Phase 1 and 2	By not consolidating land use zoning and including unnecessary land use zoning, this alternative would provide for a less compact form of development that would fail to maximise benefits from infrastructural investment. By facilitating the unnecessary sprawl of the settlement and falling to consolidate zoning, this alternative would decrease the likelihood of brownfield development and conflict with efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Providing for unnecessary zoning would be likely to result in higher levels of sprawl and associated avoidable potential adverse environmental effects.

Town	Alternative	Commentary		
	(selected alternatives in bold)			
Dunmore	A Lands to the east of R328 (with flood zone A) zoned Open Space	Open Space would be an appropriate use for these lands and would be to be in compliance with the Flood Risk Management Guidelines. New Residential lands could be zoned elsewhere in the settlement on lands with low levels of flood risk. Such residential development would reduce the need for development elsewhere in the County, on less well-serviced, less-well connected, more sensitive lands – and associated adverse environmental effects.		
	B Lands to the east of R328 (within flood zone A) zoned Residential	New Residential would be an inappropriate use for these lands and would be unlikely to be in compliance with the Flood Risk Management Guidelines. Due to the elevated flood risk, the development of this site would be hindered and development pressures may present elsewhere in the County, on less well-serviced, less-well connected, more sensitive lands – and associated adverse environmental effects.		
Glenamaddy A Lands to the east of the R362 on the village zoned TC with limited development potential beyond these lands B Lands to the east of the R362 on the village zoned TC with limited development potential beyond these lands B Lands to the east of the R362 on the By consolidating land use zoning and reducing unnecessary la provide for a more compact form of development that work infrastructural investment. By consolidating the zoning and helping settlement, this alternative would increase the likelihood of brutowards efforts to improve sustainable mobility (with associate human health). Reducing unnecessary zoning would help to potential adverse environmental effects that would otherwise out of multiple environmental components. By not consolidating land use zoning and reducing unnecessary la provide for a more compact form of development that work infrastructural investment. By consolidating the zoning and helping settlement, this alternative would increase the likelihood of brutowards efforts to improve sustainable mobility (with associate human health). Reducing unnecessary zoning would otherwise out of multiple environmental components. By not consolidating land use zoning and reducing unnecessary la provide for a more compact form of development that work infrastructural investment. By consolidating the zoning and helping infrastructural investment. By consolidating the zoning and helping settlement, this alternative would increase the likelihood of brutowards efforts to improve sustainable mobility (with associate human health). Reducing unnecessary zoning would otherwise out of multiple environmental effects that would otherwise out of multiple environmental effects that would otherwise out of multiple environmental components.		By not consolidating land use zoning and including unnecessary land use zoning, this alternative would provide for a less compact form of development that would fail to maximise benefits from infrastructural investment. By facilitating the unnecessary sprawl of the settlement and failing to		
	village and beyond the TC lands zoned Residential Phase 2	consolidate zoning, this alternative would decrease the likelihood of brownfield development and conflict with efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Providing for unnecessary zoning would be likely to result in higher levels of sprawl and associated avoidable potential adverse environmental effects.		
Kinvara	A More compact residential zoning to the south of the N67 in the village zoned Residential Phase 2	By consolidating land use zoning and reducing unnecessary land use zoning this alternative would provide for a more compact form of development that would help to maximise benefits from infrastructural investment. By consolidating the zoning and helping to avoid unnecessary sprawl of the settlement, this alternative would increase the likelihood of brownfield development and contribute towards efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Reducing unnecessary zoning would help to minimise sprawl and would avoid potential adverse environmental effects that would otherwise occur - this would benefit the protection of multiple environmental components.		
	B Lands zoned to the south of the N67 in the village zoned Residential Phase 2 (2005 2011)	By not consolidating land use zoning and including unnecessary land use zoning, this alternative would provide for a less compact form of development that would fail to maximise benefits from infrastructural investment. By facilitating the unnecessary sprawl of the settlement and failing to consolidate zoning, this alternative would decrease the likelihood of brownfield development and conflict with efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Providing for unnecessary zoning would be likely to result in higher levels of sprawl and associated avoidable potential adverse environmental effects.		
Moylough	A Lands to the west of the N63, on the approach to the village Zoned Residential Phase 1, more compact development	By consolidating land use zoning and reducing unnecessary land use zoning this alternative would provide for a more compact form of development that would help to maximise benefits from infrastructural investment. By consolidating the zoning and helping to avoid unnecessary sprawl of the settlement, this alternative would increase the likelihood of brownfield development and contribute towards efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Reducing unnecessary zoning would help to minimise sprawl and would avoid potential adverse environmental effects that would otherwise occur - this would benefit the protection of multiple environmental components.		
	B Lands to the west of the N63 on the approach to the village Zoned Residential Phase 1 and 2 more sprawl	By not consolidating land use zoning and including unnecessary land use zoning, this alternative would provide for a less compact form of development that would fail to maximise benefits from infrastructural investment. By facilitating the unnecessary sprawl of the settlement and failing to consolidate zoning, this alternative would decrease the likelihood of brownfield development and conflict with efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Providing for unnecessary zoning would be likely to result in higher levels of sprawl and associated avoidable potential adverse environmental effects.		

4.7 Reasons for Choosing the Selected Alternatives in light of Other Reasonable Alternatives Considered

Selected alternatives for the Plan from each of the tiers of alternatives that emerged from the planning/SEA process are indicated above.

These alternatives have been incorporated into the Plan having regard to both:

- 1. The environmental effects which are 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 which will be used in order to monitor the likely significant effects of implementing the Plan.

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

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

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 main SEA Environmental Report and used in the evaluation. Each indicator to be monitored is accompanied by the target(s) which were identified with regard to the relevant strategic actions. Given the position of the Development Plan in the land use planning hierarchy beneath the Northern and Western Regional Spatial and Economic Strategy (RSES), the measures identified in that RSES SEA have been used - as they are or having been slightly modified - in most instances. This consistency across the hierarchy of land use plans will improve the efficiency and effectiveness of future monitoring programmes.

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.

Monitoring is an ongoing process and the programme allows for flexibility and the further refinement of indicators and targets. The Monitoring Programme may be updated to deal with specific environmental issues – including unforeseen effects – as they arise.

5.3 Sources

The Plan will form part of the wider land use planning framework comprising a hierarchy of policies, plans, programmes, etc. This wider framework, including the National Planning Framework and the Northern and Western RSES, is subject to its own SEA (and associated monitoring) requirements. At lower tiers of the hierarchy, Local Area Plans and individual projects will be subject to their own monitoring requirements as relevant.

In implementing the Monitoring Programme the Council will take into account this hierarchy of planning and environmental monitoring.

Sources for indicators may include existing monitoring databases (including those maintained by planning authorities and national/regional government departments and agencies) and the output of lower-tier environmental assessment and decision making (including a review of project approvals granted and associated documents and the output of any EIA monitoring programmes).

Internal monitoring of the environmental effects of grants of permission in the Council would provide monitoring of certain indicators on a *grant of permission*⁴ basis. Where significant adverse effects as a result of the development to be permitted are identified, such effects could be identified, recorded and used to inform monitoring evaluation.

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⁴ The likely significant effects of development proposals on environmental sensitivities are further determined during the development management process. Documenting any identified effects as a result of a development to be permitted can help to fulfill monitoring requirements.

5.4 Reporting and Responsibility

The Council shall, in conjunction with the Regional Assembly and other sources as relevant, implement the monitoring programme as set out on Table 5.1. This will include the preparation of stand-alone SEA Monitoring Reports:

- 1. To accompany the report required of the manager under Section 15(2) of the Act, including information in relation to progress on, and the results of, monitoring the significant environmental effects of implementation of the Plan, as required by Article13J(2) of the Planning and Development Regulations 2001 (as amended);
- 2. On the significant environmental effects of implementing the Plan, in advance of the beginning of the review of the next Plan.

Table 5.1 Indicators, Targets, Sources and Remedial Action

Environmental	SEO Code	s, Targets, Sources and Remedia	Targets	Sources	Remedial Action																													
Component Biodiversity, Flora and Fauna	BFF			BFF								BFF	Condition of European sites	Require all local level land use plans to include ecosystem services and green/blue infrastructure provisions in their land use plans and as a minimum, to have regard to the required targets in relation to the conservation of European sites, other nature conservation sites, ecological networks, and protected species Implement and review, as relevant, County Galway Heritage and Biodiversity Plan 2017-2022	DHLGH report of the implementation of the measures contained in the Habitats Directive - as required by Article 17 of the Directive (every 6 years). DHLGH National Birds Directive Monitoring Report for the under Article 12 (every 3 years) Consultations with the NPWS	Where condition of European sites is found to be deteriorating this will be investigated with the Regional Assembly and the DHLGH to establish if the pressures are related to Plan actions / activities. A tailored response will be developed in consultation with these stakeholders in such a circumstance.																		
		Number of spatial plans that have included ecosystem services content, mapping and policy to protect ecosystem services when their relevant plans are either revised or drafted	 Require all local level land use plans to include ecosystem services and green/blue infrastructure provisions in their land use plans and as a minimum, to have regard to the required targets in relation to the conservation of European sites, other nature conservation sites, ecological networks, and protected species Implement and review, as relevant, County Galway Heritage and Biodiversity Plan 2017-2022 	Internal review of local land use plans	Review internal systems																													
		 SEAs and AAs as relevant for new Council policies, plans, programmes etc. Status of water quality in the County's 	Screen for and undertake SEA and AA as relevant for new Council policies, plans, programmes etc. Included under Water below	Internal monitoring of preparation of local land use plans Included under Water below	Review internal systems Included under Water below																													
		water bodies Compliance of planning permissions with Plan measures providing for the protection of Biodiversity and flora and fauna – see Chapter 10 "Natural Heritage, Biodiversity and Green Infrastructure"	For planning permission to be only granted when applications demonstrate that they comply with all Plan measures providing for the protection of biodiversity and flora and fauna – see Chapter 10 "Natural Heritage, Biodiversity and Green Infrastructure"	Internal monitoring of likely significant environmental effects of grants of permission	Review internal systems																													
Population and Human Health	РНН	Implementation of Plan measures relating to the promotion of economic growth as provided for by Chapter 5 "Economic, Enterprise and Retail"	 For review of progress on implementing Plan objectives to demonstrate successful implementation of measures relating to the promotion of economic growth as provided for by Chapter 5 "Economic, Enterprise and Retail" By 2020 all citizens will have access to speeds of 30Mbps, and that 50% of citizens will be subscribing to speeds of 100Mbps (Also relevant to Material Assets) 	Internal review of progress on implementing Plan objectives Consultations with DECC	Review internal systems Consultations with DECC																													
		Number of spatial concentrations of health problems arising from environmental factors resulting from development permitted under the Plan	No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan	Consultations with the Health Service Executive and EPA	Consultations with the Health Service Executive and EPA																													

Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action
		Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures	Increase in the proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures	CSO data Monitoring of Galway County Council's Climate Change Adaptation Strategy 2019-2024	Where proportion of population shows increase in private car use above CSO 2016 figures, the Council will coordinate with the Regional Assembly, the DHLGH, DECC and NTA to develop a tailored response.
		Number of spatial plans that include specific green infrastructure mapping	 Require all local level land use plans to include specific green infrastructure mapping 	 Internal review of local land use plans 	Review internal systems
Soil (and Land)	s	Proportion of population growth occurring on infill and brownfield lands compared to greenfield (also relevant to Material Assets)	 Maintain built surface cover nationally to below the EU average of 4% as per the NPF In accordance with National Policy Objectives 3c of the National Planning Framework, a minimum of 30% of the housing growth targeted in any settlement is to be delivered within the existing built-up footprint of the settlement To map brownfield and infill land parcels across the County 	 EPA Geoportal Compilation of greenfield and brownfield development for the DHLGH AA/Screening for AA for each application 	Where the proportion of growth on infill and brownfield sites is not keeping pace with the targets set in the NPF and the RSES, the Council will liaise with the Regional Assembly to establish reasons and coordinate actions to address constraints to doing so.
		Instances where contaminated material generated from brownfield and infill must be disposed of	Dispose of contaminated material in compliance with EPA guidance and waste management requirements	 Internal review of grants of permission where contaminated material must be disposed of 	Consultations with the EPA and Development Management
		Environmental assessments and AAs as relevant for applications for brownfield and infill development prior to planning permission	 Screen for and undertake environmental assessments and AA as relevant for applications for brownfield and infill development prior to planning permission 	 Internal monitoring of grants of permission 	Review internal systems
Water	w	Status of water bodies as reported by the EPA Water Monitoring Programme for the WFD	 Not to cause deterioration in the status of any surface water or affect the ability of any surface water to achieve 'good status' Implementation of the objectives of the River Basin Management Plan 	EPA Monitoring Programme for WFD compliance	Where water bodies are failing to meet at least good status this will be investigated with the DHLGH Water Section, the EPA Catchment Unit, the Regional Assembly and, as relevant, Irish Water to establish if the pressures are related to Plan actions / activities. A tailored response will be developed in consultation with these stakeholders in such a circumstance. Where planning applications are rejected due to insufficient capacity in the WWTP or failure of the WWTP to meet Emission Limit Values, the Council will consider whether it is necessary to coordinate a response with the Regional Assembly, EPA and Irish Water to achieve the necessary capacity.
		Number of incompatible developments permitted within flood risk areas	Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk	Internal monitoring of likely significant environmental effects of grants of permission	Where planning applications are being permitted on flood zones, the Council will ensure that such grants are in compliance with the Flood Risk Management Guidelines and include appropriate flood risk mitigation and management measures.

Environmental	SEO Code	Indicators	Targets	Sources	Remedial Action
Material Assets	MA	Programmed delivery of Irish Water infrastructure for all key growth towns in line with Irish Water Investment Plan and prioritisation programme to ensure sustainable growth can be accommodated Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the Plan	All new developments granted permission to be connected to and adequately and appropriately served by waste water treatment over the lifetime of the Plan Where septic tanks are proposed, for planning permission to be only granted when applications demonstrate that the outfall from the septic tank will not – incombination with other septic tanks—contribute towards any surface or ground water body not meeting the objective of good status under the Water Framework Directive Facilitate, as appropriate, Irish Water in developing water and wastewater infrastructure See also targets relating to greenfield and brownfield development of land under Soil and broadband under Population and Human Health	Internal monitoring of likely significant environmental effects of grants of permission Consultations with the Irish Water DHLGH in conjunction with Local Authorities	Where planning applications are rejected due to insufficient capacity in the WWTP or failure of the WWTP to meet Emission Limit Values, the Council will consider whether it is necessary to coordinate a response with the Regional Assembly, EPA and Irish Water to achieve the necessary capacity.
		Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures	Increase in the proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures	CSO data Monitoring of Galway County Council's Climate Change Adaptation Strategy 2019-2024	Where proportion of population shows increase in private car use above CSO 2016 figures, the Council will coordinate with the Regional Assembly, the DHLGH, DECC and NTA to develop a tailored response.
Air	A	 Proportion of journeys made by private fossil fuel-based car compared to 2016 National Travel Survey levels of 74% NO_x, SO_x, PM10 and PM2.5 as part of Ambient Air Quality Monitoring 	Decrease in proportion of journeys made by private fossil fuel-based car compared to 2016 National Travel Survey levels Improvement in Air Quality trends, particularly in relation to transport related emissions of NO _x and particulate matter	CSO data Data from the National Travel Survey EPA Air Quality Monitoring Consultations with Department of Transport and Department of Environment, Climate and Communications	Where proportion of population shows increase in private car use above CSO 2016 figures, Council will coordinate with the Regional Assembly, DHLGH, DECC and NTA to develop a tailored response. See also entry under Population and human health above
Climatic Factors	С	Implementation of Plan measures relating to climate reduction targets	For review of progress on implementing Plan objectives to demonstrate successful implementation of measures relating to climate reduction targets	Internal monitoring of likely significant environmental effects of grants of permission	Review internal systems
		A competitive, low-carbon, climate- resilient and environmentally sustainable economy Share of renewable energy in transport	Contribute towards transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050 Contribute towards the target of the Renewable Energy Directive (2009/28/EC), for all Member States to reach a 10% share of renewable energy in transport by facilitating the development of electricity charging and transmission infrastructure, in compliance with the provisions of the Plan	Monitoring of Galway County Council's Climate Change Adaptation Strategy 2019-2024 EPA Annual National Greenhouse Gas Emissions Inventory reporting Climate Action Regional Office Consultations with DECC	Where targets are not achieved, the Council will liaise with the Regional Assembly and the Eastern and Midlands Climate Action Regional Office to establish reasons and develop solutions.

Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action
component		Carbon dioxide (CO ₂) emissions across the electricity generation, built environment and transport sectors	Contribute towards the target of aggregate reduction in carbon dioxide (CO ₂) emissions of at least 80% (compared to 1990 levels) by 2050 across the electricity generation, built environment and transport sectors		
		Energy consumption, the uptake of renewable options and solid fuels for residential heating	To promote reduced energy consumption and support the uptake of renewable options and a move away from solid fuels for residential heating		
		Proportion of journeys made by private fossil fuel-based car compared to 2016 levels	Decrease in the proportion of journeys made by residents of the County using private fossil fuel-based car compared to 2016 levels	 CSO data Monitoring of Galway County Council's Climate Change Adaptation Strategy 2019-2024 	Where trends toward carbon reduction are not recorded, the Council will liaise with the Regional Assembly and the Eastern and Midlands Climate Action Regional Office to establish reasons and develop solutions.
		Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures	Increase in the proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures	 CSO data Monitoring of Galway County Council's Climate Change Adaptation Strategy 2019-2024 	 Where proportion of population shows increase in private car use above CSO 2016 figures, the Council will coordinate with the Regional Assembly, the DHLGH, DECC and NTA to develop a tailored response.
Cultural Heritage	Monuments and Place context these entries surrounding landscape w protected from adversulting from developm	Percentage of entries to the Record of Monuments and Places, and the context these entries within the surrounding landscape where relevant, protected from adverse effects resulting from development which is granted permission under the Plan	Protect entries to the Record of Monuments and Places, and the context of these entries within the surrounding landscape where relevant, from adverse effects resulting from development which is granted permission under the Plan	Internal monitoring of likely significant environmental effects of grants of permission	 Where monitoring reveals visitor of development pressure is causing negative effects on designated archaeological of architectural heritage, the Council will work with Regional Assembly, Failte Ireland and the National Monuments Service and othe stakeholders, as relevant, to address
		Percentage of entries to the Record of Protected Structures and Architectural Conservation Areas and their context protected from significant adverse effects arising from new development granted permission under the Plan	Protect entries to the Record of Protected Structures and Architectural Conservation Areas and their context from significant adverse effects arising from new development granted permission under the Plan	Consultation with DHLGH	pressures through additional mitigation.
Landscape	L	 Number of developments permitted that result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in Land Use Plans, resulting from development which is granted permission under the Plan 	No developments permitted which result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in Land Use Plans, resulting from development which is granted permission under the Plan	 Internal monitoring of likely significant environmental effects of grants of permission 	Where monitoring reveals developments permitted which result in avoidable adverse visual impacts on the landscape, the Council will re-examine Plan provisions and the effectiveness of their implementation