

STRATEGIC ENVIRONMENTAL ASSESSMENT

of the Draft Sligo County Development Plan 2017-2023

**Non-Technical
Summary**

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1. Introduction to SEA

This is the Non-Technical Summary of the Environmental Report (ER) prepared as part of the Strategic Environmental Assessment (SEA) of the Draft Sligo County Development Plan 2017-2023 (CDP). The purpose of the ER is to provide a clear understanding of the likely environmental consequences of decisions regarding future development in County Sligo, as expressed in the Draft CDP policies and objectives.

1.1 What is Strategic Environmental Assessment (SEA)?

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

Addressing potential environmental effects is essential, because the type and location of future development in the County will be partly determined by the policies and objectives contained in the County Development Plan. By anticipating potential effects of CDP policies and objectives, future development can be directed towards robust receiving environments, thus avoiding sensitive areas.

Careful examination of key environmental issues and relevant legislative requirements helped the SEA/Planning team select the most appropriate future development scenario for County Sligo and prepare a Draft CDP that protects and seeks to improve the County's environment.

1.2 Purpose and contents of the Environmental Report

The Environmental Report contains the following information:

- a description of the environment and the key environmental issues relating to County Sligo;
- a description and an evaluation of alternatives for the Plan;
- an evaluation of Plan policies and objectives;
- mitigation measures designed to ensure compliance with environmental legislation (e.g. the Water Framework Directive, the Habitats Directive and corresponding Irish Regulations) - and to avoid or reduce any negative environmental effects of implementing the Plan.

The Environmental Report presents a detailed account of the desktop study of environmental issues, policy evaluation and selection of the optimal approach to development in County Sligo.

The elected members of Sligo County Council are legally required to take account of the findings of the Environmental Report before adopting the CDP 2017-2023.

Upon adoption of the CDP, the Environmental Report will be updated to reflect any changes that may be made to the Draft Plan following the public display periods.

An SEA Statement will also be published. The Statement will summarise the process of integrating environmental considerations into the CDP.

1.3 Stages in the SEA

The preparation of the Draft Plan and the SEA were fully integrated due to the fact that both have been carried out by the same team – the Development Planning Unit of Sligo County Council.

Figure 1.1 below shows the main stages in the SEA process in relation to the CDP process.

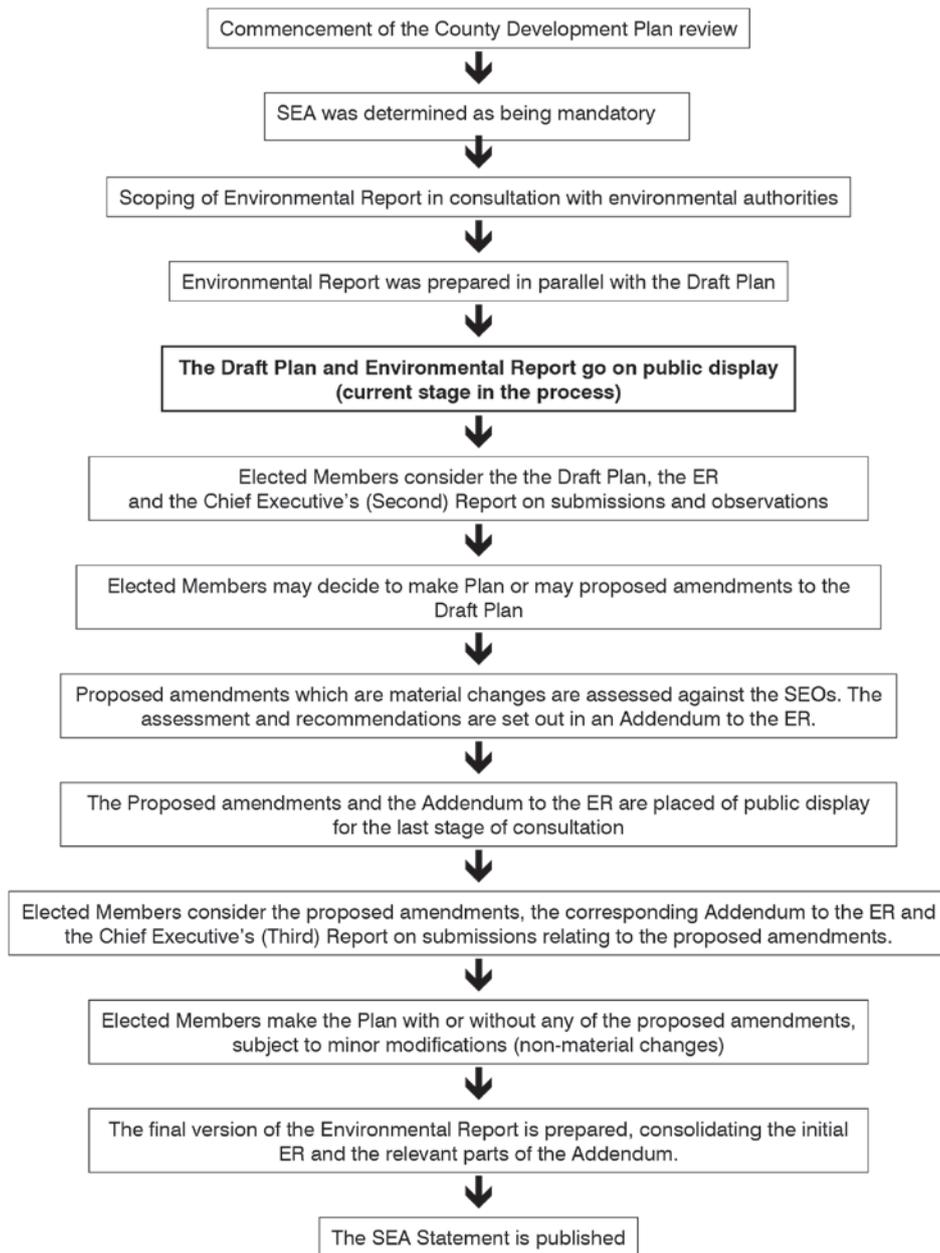


Figure 1.1 County Development Plan preparation and SEA stages

1.3.1 Draft Plan stage

This (initial) version of the Environmental Report relates to the **Draft Sligo CDP 2017-2023**. The Draft Plan and associated documents will be subject to public consultation for a period of minimum 10 weeks starting in September 2016.

1.3.2 Proposed amendments

Amendments to the Draft Plan may be proposed on foot of the submissions and observations received during consultation. These amendments will be assessed for potential environmental effects. The assessment and recommendations will be published alongside the Proposed Amendments to the Draft Plan, in an Addendum to the initial Environmental Report, for the last stage of public consultation.

1.3.3 Adoption of the CDP

The Environmental Report and the Addendum will be consolidated upon the adoption of the CDP 2017-2023. An SEA Statement will also be published at that stage.

SEA – Non-Technical Summary of the Environmental Report
of the Draft Sligo County Development Plan 2017-2023
for public consultation – September 2016

2. Alternative development scenarios for County Sligo

2.1 Description of alternative development scenarios

The SEA Directive requires that reasonable alternatives (taking into account the objectives and the geographical scope of the Plan) are identified, described and evaluated in relation to their likely significant effects on the environment. These alternatives must be realistic, capable of implementation, and should represent a range of different approaches within statutory and operational requirements of the Plan.

Taking into account the objectives and the geographical scope of the CDP, three development scenarios were formulated. The *Demand-Led Growth*, the *Gateway-Focused Growth* and the *Hierarchically-Structured Growth* scenarios provide alternative visions of how future growth might occur in County Sligo.

2.1.1 Demand-Led Growth Scenario (DLG)

This approach would involve demand-led growth, with minimal intervention in terms of strategic planning. It would result in over-zoning in certain settlements, especially in those very close to Sligo City, and in increased numbers of one-off housing in the nearby countryside.

As growth is allowed to occur in villages like Strandhill, Ballincar or Rosses Point and in the surrounding rural areas, Sligo City would be weakened by the continued loss of population.

2.1.2 Gateway-Focused Growth Scenario (GFG)

This approach involves concentrating growth in the Gateway City of Sligo. The RPG residential land provision for County Sligo would be allocated almost entirely to Sligo City. New development outside the Gateway would be strictly controlled, with the exception of rural or resource-based activities such as agriculture, forestry, quarrying and projects related to renewable energy.

The concentration of growth in the Gateway has the potential to create a city with the critical mass that would help it to compete with larger cities in attracting investment and jobs. This approach would be inevitably detrimental to other settlements within the County, particularly to the Key Support Towns of Tobercurry and Ballymote, where the scarcity of employment opportunities would result in population decline.

2.1.3 Hierarchically-Structured Growth Scenario (HSG)

The main elements of the HSG Scenario are the development of the Gateway as envisaged in the National Spatial Strategy and the consolidation of three key towns that provide services to extensive rural areas.

This scenario involves the implementation of a long-term, strategic planning approach promoting a balanced development pattern across the County, structured upon a hierarchy of settlements with well-

defined roles. **Tier 1** in the hierarchy is the Gateway, which functions in tandem with its satellite villages. Key Support Towns are on **Tier 2**, with **Tier 3** consisting of villages serving rural communities.

In order to direct specific amounts of growth into Tier 1 and Tier 2 locations, development in non-strategic locations (Tier 3) would be confined to levels that do not undermine the potential of the Gateway and Key Support Towns.

The Key Support Towns would see growth in a reasonable proportion to their existing population.

In Tier 3 villages, only small-scale residential development would be facilitated, in order to attract new residents and support local services.

2.2 Evaluation of the alternative scenarios

The three development scenarios were assessed in terms of their potential for accommodating future growth in County Sligo having regard to their interaction with the receiving environment.

The optimal variant that emerged from the evaluation process is the Hierarchically-Structured Growth (HSG) scenario. The HSG scenario was chosen for the Development Plan by the plan-making team having regard to:

1. the environmental effects which were identified by the Strategic Environmental Assessment;
2. planning effects, including social and economic effects.

This scenario achieves a good balance between potential environmental impacts and conformance with relevant national and regional planning objectives. The approach also achieves a proper balance between economic, environmental and social considerations with regard to development in County Sligo for the period 2017 to 2023.

Section 7 of the Environmental Report provides a detailed evaluation of the three development scenarios with regard to their environmental and planning effects, and highlights the reasons why the HSG Scenario is the preferred development approach for County Sligo

3. The Draft Sligo CDP 2017-2023

3.1 Structure and content

The Draft County Development Plan 2017–2023 sets out the strategic framework for sustainable development in the County, in spatial, social, economic and environmental terms. The Plan builds on the review of the Sligo CDP 2011-2017, taking into account recent changes, as well as national, regional and local policy developments.

The Draft CDP consists of a written statement and a set of maps, as required by legislation. The Plan is structured in two volumes, with the following contents:

Volume 1 – Main written statement (contains strategic and general policies and objectives)

Chapter 1 – County Sligo today: the planning issues

Chapter 2 – Strategic Environmental Assessment

Chapter 3 – Core Strategy

Chapter 4 – Economic development

Chapter 5 – Housing

Chapter 6 – Community facilities

Chapter 7 – Heritage

Chapter 8 – Transport and mobility

Chapter 9 – Environmental infrastructure

Chapter 10 – Environmental quality

Chapter 11 – Energy and telecommunications

Chapter 12 – Town and village design

Chapter 13 – Development management standards

Volume 2 – Mini-plans (contains general policies, specific objectives and zoning maps for thirty-two villages)

Chapter 1 – Mini-plans: general policies

Chapters 2 to 19 – Mini-plans for villages in the Ballymote-Tobercurry Municipal District

Chapters 20 to 33 – Mini-plans for villages in the Sligo Municipal District

3.2 Relationships with other relevant plans and programmes

The Draft Plan sits within a hierarchy of strategic plans. It must comply with higher-level plans, such as the National Spatial Strategy and the Border Regional Planning Guidelines, and it sets the framework for lower-level plans, such as local area plans.

3.3 Environmental protection objectives

The Plan is subject to a number of high-level national, international and regional environmental protection policies and objectives, including those which have been developed as Strategic Environmental Objectives (see Section 5 of this NTS and Section 4 of the ER).

Strategic Environmental Objectives (SEOs) are methodological measures derived from environmental protection objectives established at national or international level (e.g. through EU Directives). SEOs are used as standards against which the provisions of the Plan can be evaluated, in order to identify areas in which significant adverse impacts are likely to occur, if unmitigated.

The Plan must be consistent with these objectives and implement them at County level in Sligo.

4. County Sligo: environmental baseline

4.1 Brief geographical information

County Sligo is located in the north-west of Ireland and is bordered by counties Mayo, Roscommon and Leitrim. It has an area of 1,838 sq.km.

The population of County Sligo grew from 58,200 in 2002 to 60,894 in 2006, 65,393 in 2011 and remained nearly stationary at 65,357 in 2016 (preliminary Census results, July 2016). Current average population density is 35 inhabitants per square km.

Sligo City is the main urban centre, with 19,452 persons living in the Sligo and Environs area (Census 2011). Enniscrone, Ballymote and Tobercurry, each with populations under 2,000, act as supporting towns. Most villages are small, with populations of only a few hundred, with the exception of Ballysadare, Collooney and Strandhill, which had 1,344, 1,369 and 1,596 inhabitants respectively in 2011 (Census data).

In towns and villages there is a mix of land uses, including residential, commercial and industrial. The primary land use in the rural areas is agriculture.

County Sligo has a diverse range of natural habitats such as coastlines, lakes, rivers, bogs, woodland etc. Many of these are designated for protection under national and EU legislation.

4.2 Biodiversity, flora and fauna

4.2.1 Overview of habitats

County Sligo supports a diversity of natural and semi-natural habitats and a wide range of plant and animal species, some of which have come under threat. Agricultural lands, woodlands and grasslands represent a variety of habitats and corridors that provide for the movement of wildlife.

The County falls into the catchments of the Ballysadare, Moy and Garavogue rivers. These rivers, tributaries and associated lakes support good areas of biodiversity for which they represent key ecological corridors

The predominant land cover is Pastures. Areas of Peat Bogs can be found in the north, mid-east and along the southern boundary, extending to particularly large areas in the west of the County. Areas of Complex Cultivation Patterns, Non-Irrigated Arable Land and Transitional Woodland Scrub can be found dispersed throughout the County.

Ecological designations within County Sligo include Special Protection Areas (10 sites), Special Areas of Conservation (13 sites) and Natural Heritage Areas (3 designated and 34 proposed sites).

Further areas of significance include four Ramsar sites (wetlands of international importance), three statutory Nature Reserves and a variety of sites, water bodies included on the Register of Protected Areas (important for the protection of surface water, groundwater and water-dependent habitats) and Salmonid waters.

4.2.2 Existing problems

Changes in land cover indicated by the CORINE data indicate that many semi-natural areas within the County have been replaced by uses which generally include impermeable surfaces. These changes are likely to result in losses of biodiversity and flora and fauna.

Any deterioration in surface water quality is likely to impact upon aquatic biodiversity, flora and fauna.

Threats to the conservation value of designated sites (SPAs, SACs, NHAs) come from overgrazing, afforestation, under-grazing and agricultural run-off.

4.2.3 Evolution of biodiversity, flora and fauna in the absence of the Plan

In the absence of a Development Plan, development would have no guidance regarding optimal location. There would be no integration of the ecological protection measures required by the various European Directives with the planning or development management of vulnerable areas. Therefore, in the absence of a Plan, it is likely that there would be less effective protection of ecological resources.

Pollution of water bodies as a result of any poorly-planned development would be likely to adversely impact upon aquatic biodiversity, flora and fauna, including salmonid species and other species protected under Annex II of the Habitats Directive.

In the absence of a Development Plan, any greenfield development would adversely impact upon biodiversity and flora and fauna by replacing natural or semi natural habitats with artificial surfaces. The significance of such impacts would be dependent on whether such developments would result in the loss of habitats or species of importance as well as the cumulative loss and fragmentation of habitats and species.

4.3 Population and human health

4.3.1 Population

The County's population was 65,393 in 2011 and 65,357 in 2016 (preliminary Census results). Sligo and Environs is the most populous area (19,452 in 2011).

Between 2011 and 2016, the highest increase in population was in the Tobercurry ED, while the largest drop in population in the County occurred in the urban ED of Sligo North.

Upland areas are the least populated, with 1-7 persons per sq. km. Population density in Sligo City is 250-1600 persons per sq. km. Strandhill and Rosses Point EDs have densities of 60-120 persons per sq.km. Density in the remainder of the County is 7-60 persons per sq.km.

4.3.2 Human health

Hazards or nuisances to human health can arise as a result of incompatible land uses in the vicinity of built-up areas. Vectors such as air, water or soil can transport contaminants or pollutants, so that they come into contact with human beings.

These factors have been considered with regard to their baseline description and the identification and evaluation of the likely significant environmental effects of implementing the Plan or the alternatives.

4.3.3 Existing problems

Air quality in the County meets current standards. However, there are traffic “hotspots” located along the main roads, especially at intersections in urban areas. These give rise to a harsh sensory environment which may impact upon human health.

IPPC licensed facilities could be potential polluters to the Plan area if the facilities do not comply with their licenses.

4.3.4 Evolution of population and human health in the absence of the Plan

In the absence of a Development Plan, there would be no framework for the provision of infrastructure to serve existing and future development. This could delay or hinder the provision of infrastructure, and impact on environmental vectors to which humans are exposed.

4.4 Soil

Soil is the top layer of the earth’s crust formed by mineral particles, organic matter, water, air and living organisms. It performs many functions and delivers services vital to human activities and to the survival of ecosystems. These functions are biomass production, the storing, filtering and transforming of nutrients and water, hosting the biodiversity pool, acting as a platform for most human activities, providing raw materials, acting as a carbon pool and storing geological and archaeological heritage.

Soil is under increasing environmental pressure and should be protected from degradation. Soil degradation or soil improvements have a major impact on surface water and groundwater protection, human health, climate change, protection of nature and biodiversity, and food safety.

To date, there is no Irish legislation which is specific to the protection of soil resources. However, the European Seventh Environment Action Programme (2014) requires the sustainable management, protection and remediation of soil in EU Member States.

4.4.1 Existing problems

The sealing off of soil through greenfield development, the increasing use of wastewater treatment systems to serve individual houses, contamination and erosion due to agricultural and forestry operation – all have the potential to affect the soil in County Sligo. Coastal erosion is also noted as a problem.

4.4.2 Evolution of soil in the absence of the Plan

In the absence of the Development Plan, the evolution of soil would be dependent on developments which take place at random, because there would be no framework for directing growth towards brownfield sites, where such direction is appropriate. As a result, more greenfield development would be likely to occur, resulting in the building upon and thereby sealing off of the non-renewable subsoil and soil resources.

In the absence of a Plan, there would be no framework for the provision of infrastructure – such as that relating to wastewater treatment – to serve existing and future development. Therefore, soil may become polluted and contaminated by inappropriately serviced development.

4.5 Water

Water within and surrounding the County has many functions: it provides drinking water to the area's population; is essential for the growth of the commercial and agricultural sector; it sustains biodiversity, flora and fauna; it provides amenity; it is an integral part of the landscape.

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

- domestic sewage and trade effluents discharged to waters from point sources, e.g. pipes from treatment plants;
- discharges arising from diffuse or dispersed activities on land;
- abstractions from waters;
- structural alterations to water bodies.

4.5.1 The Water Framework Directive (WFD)

Since 2000, Water Management in the EU has been directed by the Water Framework Directive 2000/60/EC (WFD), which requires that all Member States implement the necessary measures to prevent deterioration of the status of all waters - surface, ground, estuarine and coastal - and protect, enhance and restore all waters with the aim of achieving “good status” within timeframes specified in the Directive. All public bodies are required to coordinate their policies, functions and operations so as to maintain existing good status water bodies and improve unsatisfactory water bodies.

At present, the functional area of Sligo County Council is located within three River Basin Districts, namely, the Western RBD, the Shannon International RBD and the North Western International RBD.

Work has commenced on the second cycle of the River Basin District Management Plans, which may potentially result in one River Basin District Management Plan being produced for the geographical area of the Republic of Ireland. The new River Basin District Management Plan is due to be published by mid-2017.

4.5.2 Surface water

The principal lakes in County Sligo are Lough Gill, Lough Arrow, Lough Gara, Lough Easky and Lough Talt, all of which are utilised for the provision of potable water supply to urban centres, rural villages and a wide rural hinterland. The main rivers are the Garavogue, Moy, Owenaher, Easky, Owenboy, Unshin and Owenmore.

In general, surface water (lakes and rivers) within County Sligo are of good status. There are a number of moderate and poor-status sites where water quality must be improved. Tobercurry Stream, a tributary of the River Moy, is currently classified at bad status. Templehouse Lake is classified at bad status.

4.5.3 Groundwater

Groundwater is stored in the void spaces in underground layers of rock, or aquifers and is the part of the subsurface water that is in the saturated zone – the zone below the water table.

In the most recent groundwater assessment issued by the Environmental Protection Agency, all groundwater within County Sligo was classified at good status.

The Groundwater Protection Scheme for County Sligo has increased confidence in terms of the classification and identification of aquifer vulnerability. Areas around Lough Gill, particularly to the south of the lake, are rated as *Extreme* (Karst/surface rock) along with other localised areas throughout the County. Areas of extreme vulnerability mainly occur along the south-east County boundary and along the coast from Enniscrone to Beltra.

4.5.4 Bathing water

The Bathing Water Quality Regulations 2008 provide for the transposition of EU Bathing Water Directive 2006 (2206/7/EC) into national law and aim to improve health protection for bathers, establish a more pro-active approach to the management of bathing waters and to promote increased public involvement and provision of information to members of the public.

A new, four-category classification system for bathing waters is established under the Regulations: poor, sufficient, good and excellent. Under the Regulations, local authorities must take appropriate steps to improve existing poor category bathing waters and to increase the number of good and high category bathing waters.

Sligo County Council has established an ongoing annual monitoring programme for bathing waters within the County. Based on 2013 monitoring data, all Bathing Waters achieved at least sufficient water quality status. Streedagh, Rosses Point, Dunmoran and Mullaghmore beaches were classified as excellent, while Enniscrone was categorised as good status.

4.5.5 Coastal, estuarine and transitional water

The principal estuarine, transitional and coastal waters which may be impacted by the Plan include Sligo, Drumcliff and Ballysadare Bays and their respective estuaries.

Waters at Sligo Bay, Ballysadare Bay, Sligo Harbour and Killala Bay are unpolluted and have remained so since 1995. The Garavogue Estuary is classified as intermediate.

4.5.6 Register of Protected Areas

The WFD requires that Registers of Protected Areas (RPAs) are compiled for a number of water bodies or part of water bodies which must have extra controls on their quality by virtue of how their waters are used by people and by wildlife..

These RPA contains the following:

- areas from which waters are taken for public or private water supply schemes;
- designated shellfish production areas;
- bathing waters;
- areas which are affected by high levels of substances most commonly found in fertilizers, animal and human wastes - these areas are considered nutrient sensitive;
- areas designated for the protection of habitats or species e.g. salmonid areas;
- Special Areas of Conservation (SACs); and,
- Special Protection Areas (SPAs).

4.5.7 Flooding

Flooding is an environmental phenomenon which, as well as causing economic and social impacts, could in certain circumstances pose a risk to human health. County Sligo is vulnerable to adverse effects which are exacerbated by changes in the occurrence of severe rainfall events, high tides and associated flooding of the County's rivers. Local conditions, such as low-lying lands and inadequate surface water drainage, increase the risk of flooding. The risk of flooding has also been increased in the past by human actions such as the clearing of vegetation to make way for agriculture, draining of bog and wetland areas and the development of settlements in the flood plains of rivers.

In response to the transposing into Irish Law of the European Directive 2007/60/EC, the DEHLG published *The Planning System and Flood Risk Management Guidelines for Planning Authorities* and the OPW commenced a national Catchment Flood Risk Assessment and Management Programme (CFRAM) in 2011. The CFRAM comprises three main phases: Preliminary Flood Risk Assessment, the CFRAM Studies and the implementation and review of flood risk management plans.

The *Guidelines* are aimed at ensuring a more consistent, rigorous and systematic approach which will fully incorporate flood risk assessment and management into the planning system. Planning authorities are required to undertake flood risk identification, assessment and management processes as appropriate when preparing or varying development plans and local area plans and in consideration of applications for planning permission.

The Strategic Flood Risk Assessment undertaken in conjunction with the Draft Plan informed the SEA and resulted in the integration of a number of policies and objectives into the Plan.

4.5.8 Existing problems

There are environmental problems in Sligo with regard to water quality, which have the potential for significant adverse impact upon human health, drinking water supplies, biodiversity and flora and fauna. Water quality data identifies multiple points on rivers throughout County Sligo as being of Moderate, Poor or Bad Status. Flooding has occurred at various locations within the County.

4.5.9 Evolution of Water in the absence of the Plan

Based on current data, certain surface and groundwater bodies are at a status less than *good*, which is the standard required. If growth is not accompanied by appropriate wastewater treatment capacity, then it is likely that:

- certain river and groundwater bodies will fail to meet the objectives of the WFD;
- significant adverse impacts upon the biodiversity and flora and fauna of the County could arise.

4.6 Materials assets

3.6.1 Wastewater

The treatment of wastewater is governed by the Urban Waste Water Treatment Directive (91/271/EEC) (amended by Directive 98/15/EEC). In January 2014, control over the provision of water and wastewater services was transferred from Sligo County Council to Irish Water (IW). Irish Water is now responsible for the operation of public water and wastewater services.

The treatment plants of certain towns and villages have spare capacity while others are severely overloaded.

The Irish Water Capital Investment Plan 2014-2016 includes upgrade proposals for the following plants: Ballinacarrow, Ballinafad, Ballymote, Collooney, Grange, Strandhill and Tobercurry.

Sligo County Council has committed to working closely with Irish Water to ensure that the provision of water and wastewater services is aligned with the Core Strategy of the County Development Plan and will support future growth in the County.

4.6.2 Drinking water

Drinking water must meet the relevant water quality standards and must not contain any other substance or micro-organism in concentrations or numbers that constitute a potential danger to human health. To ensure that these standards are met, each water supply must be monitored on a regular basis. The EPA collects and verifies monitoring results for public water supplies and publishes annual reports which include Remedial Action Lists.

There are three public water supplies in Sligo on the EPA's Remedial Action List for Q1 2016. The Lough Gill Regional Water Supply and the South Sligo Regional Water Supply are listed for having

elevated levels of THMs (Trihalomethanes, a group of organic chemicals) above the standard in the Drinking Water Regulations. Lough Talt Regional Water Supply is listed for inadequate treatment for *Cryptosporidium* (a parasite that causes a diarrhoeal illness in humans, known as cryptosporidiosis).

4.6.3 Existing problems relating to material assets

It is the responsibility of Irish Water to meet the commitments under the Water Framework Directive (see Section 3.5.3). This could be compromised due to the shortfall in wastewater treatment capacity.

Eight of the County's thirty-five wastewater treatment plants are operating at or over capacity.

In those parts of the County outside the catchment of the wastewater treatment network, developments use septic tanks to treat wastewater. On-site treatment systems which are not properly maintained have the potential to affect the environment.

4.6.4 Evolution of material assets in the absence of the Plan

In the absence of a Development Plan, there would be no framework to provide the necessary infrastructure to serve existing and proposed development in the County.

Failure to provide sufficient infrastructure for development would be likely to result in significant adverse impacts on the environment.

4.7 Air, noise and climatic factors

4.7.1 Ambient air quality

Air quality is dependent on many factors including local and national weather conditions as well as point and diffuse sources of air pollutants. In order to protect human health, vegetation and ecosystems, EU Directives have established air quality standards for a wide variety of pollutants.

The EPA measures the levels of a number of atmospheric pollutants. For the purposes of monitoring in Ireland, four zones are defined in the Air Quality Standards Regulations 2011. The main areas defined in each zone are:

- Zone A: Dublin conurbation
- Zone B: Cork conurbation
- Zone C: 23 other cities and large towns (including Sligo Town)
- Zone D: Rural Ireland, i.e. the remainder of the State – small towns and rural areas of the country (excluding Zones A, B and C)

The Plan area falls into Zones C and D. There is only one air quality monitoring site in Sligo, located in the car park in front of the Regional Hospital.

4.7.2 IPPC licensed facilities

The EPA has been licensing certain large-scale industrial and agriculture activities since 1994. An IPPC (Integrated Pollution Prevention Control) license covers all emissions from the facility and its environmental management. All related operations that the license holder carries in connection with the activity are controlled by this license. Before a license is granted, the EPA must be satisfied that emissions from the activity do not cause a significant adverse environmental impact.

There are seven IPPC licensed facilities in County Sligo.

4.7.3 Noise

Noise is unwanted sound. It can seriously harm human health and interfere with daily activities at school, at work, at home and during leisure time. Areas within the County which are commonly affected by noise are urban areas and areas along roadsides. The only noise source which requires an action plan in County Sligo is road traffic noise.

Strategic noise mapping was undertaken in 2007 by the National Roads Authority for a section of the N-4. A Noise Action Plan for County Sligo was prepared by Sligo County Council in 2009.

4.7.4 Climatic factors

Climate change refers to any change in climate over time, whether due to natural variability or as a result of human activity. The release of greenhouse gases into the atmosphere as a result of human activities adds to natural climate variability by increasing the naturally occurring greenhouse effect.

In October 2014, the European Council approved the *2030 Framework for Climate and Energy* which envisages, inter alia, a substantial reduction in greenhouse gas emissions by 2030.

Agriculture remains the single largest contributor. Transport continues to be the dominant growth sector with emissions 2.5% higher in 2014 than in 2013.

4.7.5 Existing problems

Transport-related emissions continue to be the dominant growth sector. The main effects of implementing the Plan on climatic factors relate to greenhouse gas emissions arising from transport. Traffic hotspots within the County area are likely to have elevated levels of air pollution and noise due to traffic congestion.

Changes in sea level and/or changes in the occurrence of severe rainfall events as a result of climate change could adversely impact upon the County's inhabitants, its biodiversity and its economy.

4.7.6 Evolution of Air and Climatic Factors in the absence of the Plan

If new development occurs in the County in a dispersed pattern, adverse impacts upon air quality and noise levels, and resultant impacts upon human health, would be likely to arise if unmitigated.

In the absence of the Plan, objectives relating to energy efficiency, renewable energy and a reduction in local transport-related emissions to air may not be realised.

4.8 Cultural heritage

Cultural heritage includes physical buildings, structures and objects, complete or in part, which have been left on the landscape by previous and current generations. Human interaction with the land is evident from the earliest of times up to the present in County Sligo, from agricultural landscapes to archaeological remains and growing settlements.

4.8.1 Archaeological heritage

With over 6,500 known archaeological sites and monuments, County Sligo has one of the highest densities of archaeological remains in Ireland. Among the significant archaeological and historical landscapes, the most notable are the Cuil Irra Peninsula (which includes Knocknarea, Carrowmore and Carns Hill), Carrowkeel and Inishmurray.

Sligo's archaeological heritage is protected under the National Monuments Acts (1930-2004), Natural Cultural Institutions Act 1997 and the Planning Acts. The Record of Monuments and Places (RMP) is an inventory, put on a statutory basis by amendment to the National Monuments Act 1994, of sites and areas of archaeological significance, which are numbered and mapped.

4.8.2 Architectural heritage

Architectural heritage can be defined as all structures and buildings together with their settings and attendant grounds, fixtures and fittings; groups of structures and buildings; and, sites which are of technical, historical, archaeological, artistic, cultural, scientific, social, or technical interest.

The Record of Protected Structures (RPS) is a list of structures which are of special interest from an architectural, historical, archaeological, artistic, cultural, scientific, social or technical point of view.

Examples of note in the County include Lissadell House, Markree Castle, City Hall, Sligo, the many bridges, shop and pub fronts and coastal structures.

4.8.3 Existing cultural heritage problems

Threats to cultural heritage might include the cumulative impact of large-scale development in the County, development which involves material alteration or additions to protected structures, brownfield development and development on sites adjoining protected monuments, places or structures.

4.8.4 Evolution of Cultural Heritage in the absence of the Plan

In the absence of the Plan, the evolution of cultural heritage would be dependent on developments which take place with no guidance as to optimal locations.

Beneficial impacts upon cultural heritage, which would be likely to arise as a result of the Plan provisions, would not necessarily occur in its absence.

4.9 Landscape

Landscape consists of all the visible features of an area of land, often considered in terms of their aesthetic appeal. Landscapes are made up of a number of layers:

- land form, which results from geological and geomorphological history;
- land cover, which includes vegetation, water, human settlements;
- visible marks of historical, cultural, religious and other forms of interactions between humans and with land form or land cover.

4.9.1 Sligo's unique landscapes

Remarkable landscapes in County Sligo include Ben Bulbin (526 m), Truskmore (645 m), Knocknarea and the Ox Mountains.

The Cuil Irra Peninsula, which lies to the south-west of Sligo town, has an exquisite landscape of heritage value, containing the megalithic cemetery at Carrowmore, the iconic cairn known as Miosgán Meadhbha (Maeve's Cairn) at the top of Knocknarea and two large cairns on the summit of Carns Hill. The cairns are comparable in size to Maeve's Cairn on Knocknarea.

A Scenic Evaluation Study of the landscape of County Sligo (prepared by CAAS, on behalf of Sligo County Council) formed the basis for the Landscape Characterisation Map, which forms part of the Draft CDP. The Map, which classifies the landscape into Normal Rural Landscapes, Sensitive Rural Landscapes, Visually Vulnerable Areas, Scenic Routes, has been slightly amended as part of successive development plan reviews.

4.9.2 Existing landscape problems

General landscape problems include the cumulative visual impact resulting from developments, particularly one-off houses. Such developments, which individually often do not have adverse impacts, cumulatively, have the potential to significantly impact upon sensitive landscapes.

4.9.3 Evolution of Landscape in the absence of the Plan

In the absence of a Plan, development would be likely to occur on a one-off, dispersed basis. As outlined above, this could have significant cumulative impacts on the landscape. Safeguarding the landscape resources would be possible to a limited degree, through the development management process.

4.10 Overlay of environmental sensitivities

In order to identify where most sensitivities within the County occur, a number of the environmental sensitivities described in previous sections were weighted and mapped overlapping each other.

The main and largest area of acute vulnerability occurs in the north of the County, in the vicinity of Ben Bulbin. This can be attributed to designated sites (SACs and SPAs), landscape vulnerability, geological heritage sites and waters listed on the RPA.

Areas between Kesh and Lough Arrow in the south-east of the County are also vulnerable, as are areas around Ballinacorney, Tobercurry, Achonry, Ballygawley and around the Ox Mountains.

5. Evaluation of Draft Plan provisions

5.1 Methodology

Section 8 of the Environmental Report evaluates the Draft Plan’s policies and objectives. Strategic Environmental Objectives (SEOs) are used for this purpose. Use has also been made of the environmental baseline descriptions of the individual environmental components. The interactions between the SEOs and the policies and objectives of the Plan determine the likely significant effects of implementing the Plan. These effects include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects.

Table 5.1 (below) brings together all the SEOs which have been developed from international, national and regional policies which generally govern environmental protection objectives.

Table 5.1 Strategic Environmental Objectives (SEOs)

SEO Code	SEO
B1	To ensure compliance with the Habitats Directive with regard to the protection of Natura 2000 Sites and habitats and species listed under Annexes I and II of the Directive
B2	To ensure compliance with Article 10 of the Habitats Directive with regard to the protection of macro-corridors and contiguous areas of habitat which are important on a County level for wild fauna and flora and essential for the migration, dispersal and genetic exchange of wild species
B3	To sustain existing rural management practices - and the communities who support them - to ensure the continuation of long established managed landscapes and the flora and fauna that they contain
P1	Maximise the sustainable re-use of brownfield lands, and maximise the use of the existing built environment rather than developing greenfield lands
HH1	To protect human health from hazards or nuisances arising from exposure to incompatible land uses
S1	To prevent pollution and contamination of soil
W1	To maintain and improve, where possible, the status of surface waters
W2	To prevent pollution and contamination of groundwater
W3	To comply with the provisions of the <i>Planning System and Flood Risk Management Guidelines for Planning Authorities</i> (DEHLG, 2009)
M1	To serve new development with appropriate wastewater treatment
M2	To serve growth areas with drinking water that is both wholesome and clean
C1	To reduce travel-related emissions and encourage sustainable forms of transport
CH1	To protect the archaeological heritage of the County including entries to the Record of Monuments and Places and their context
CH2	To preserve and protect the special interest and character of the County’s architectural heritage
L1	To avoid significant adverse impacts on the landscape, especially with regard to landscapes which are most valuable and most sensitive to change – including seascapes and coastscapes – and protected views and routes

5.2 Determination of potential interactions

Certain Plan policies and objectives are evaluated as having potential conflicting interactions with the status of SEOs. The interaction and environmental impacts, if any, will be determined by: the nature and extent of individual projects or multiple projects, lower-tier plans and subsequent development, and site-specific environmental factors.

These impacts may be evaluated as part of a lower-tier environmental assessment or by the development management process.

Avoidance of conflict is dependent upon the Council managing development in a way which does not conflict with the status of SEOs.

Providing other Plan measures are complied with, unnecessary conflicts with SEOs would be avoided.

6. Mitigation and monitoring measures

6.1 Mitigation

Mitigation measures are measures envisaged to prevent, reduce and partially or fully offset significant adverse impacts on the environment, arising from the implementation of the County Development Plan. Where there are significant negative effects, consideration is given in the first instance to preventing such effects or, where this is not possible for stated reasons, to lessening or offsetting those effects.

The likely significant environmental effects of implementing the County Development Plan have been mitigated through:

- the early consideration of environmental sensitivities during the preparation of the Plan;
- the selection of the optimal development scenario out of three potential approaches
- the inclusion of mitigating policies and objectives into the Plan's main written statement;
- Integration of environmental considerations into the zoning and development objectives for thirty-two village mini-plans.

Mitigating policies and objectives have been integrated into the Plan for the following environmental components:

- biodiversity, flora and fauna
- human health, air and noise
- water and soil
- flooding, environmental infrastructure (water supply, wastewater treatment, waste management)
- energy, climate change and greenhouse gas emissions
- archaeological and architectural heritage, landscape

6.2 Monitoring

The SEA Directive requires that the significant environmental effects of the implementation of plans and programmes are monitored. Monitoring enables the identification of unforeseen adverse effects and the undertaking of appropriate remedial action at an early stage.

In addition to this, monitoring can also play an important role in assessing whether the Plan is achieving environmental objectives and targets, whether these need to be re-examined and whether the mitigation measures are being implemented.

Monitoring uses indicators that allow quantitative measures of trends and progress over time relating to the Strategic Environmental Objectives used in the evaluation. Each indicator to be monitored is accompanied by the target(s) which were identified with regard to the relevant legislation.

Monitoring sources exist for each of the indicators and include those maintained by the Sligo County Council and other relevant authorities e.g. the Environmental Protection Agency, the National Parks

and Wildlife Service and the Central Statistics Office. Measurements for indicators should come from existing monitoring sources. No additional monitoring should take place.

Where significant environmental effects – including positive, negative, cumulative and indirect – are likely to occur as a result of implementing lower-tier plans and programmes, such instances should be identified and recorded and should feed into the monitoring evaluation.

A preliminary monitoring evaluation report on the effects of implementing the County Development Plan will be prepared to coincide with the Chief Executive's report to the Elected Members on the progress achieved in securing Plan objectives within two years of the making of the Plan (as required under Section 15 of the 2000 Planning Act).

Indicators and targets will be reviewed during the preparation of the preliminary monitoring evaluation report.