

# ENVIRONMENTAL REPORT

---

OF THE

## SLIGO AND ENVIRONS DEVELOPMENT PLAN 2010-2016

### STRATEGIC ENVIRONMENTAL ASSESSMENT



**For:**

**Sligo Borough Council**

**&**

**Sligo County Council**

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## List of Abbreviations

<b>CSO</b>	Central Statistics Office
<b>DEHLG</b>	Department of the Environment, Heritage and Local Government
<b>EIA</b>	Environmental Impact Assessment
<b>EPA</b>	Environmental Protection Agency
<b>EU</b>	European Union
<b>GSI</b>	Geological Survey of Ireland
<b>NHA</b>	Natural Heritage Area
<b>NIAH</b>	National Inventory of Architectural Heritage
<b>NSS</b>	National Spatial Strategy
<b>RBD</b>	River Basin District
<b>RMP</b>	Record of Monuments and Places
<b>RPS</b>	Record of Protected Structures
<b>SAC</b>	Special Area of Conservation
<b>SEA</b>	Strategic Environmental Assessment
<b>SEO</b>	Strategic Environmental Objective
<b>SI No.</b>	Statutory Instrument Number
<b>SPA</b>	Special Protection Area
<b>WFD</b>	Water Framework Directive

## Glossary

### Biodiversity and Flora and Fauna

Biodiversity is the variability among living organisms from all sources including inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species and of ecosystems' (United Nations Convention on Biological Diversity 1992).

Flora is all of the plants found in a given area.

Fauna is all of the animals found in a given area.

### Biotic Index Values (Q Values)

The Biotic Index Values, or Q values, are assigned to rivers in accordance with biological monitoring of surface waters - low Q ratings, as low as Q1, are indicative of low biodiversity and polluted waters, and high Q ratings, as high as Q5, are indicative of high biodiversity and unpolluted waters. Good status as defined by the Water Framework Directive equates to approximately Q4 in the national scheme of biological classification of rivers as set out by the Environmental Protection Agency.

### Environmental Problems

Annex I of Directive 2001/42/EC of the European Parliament and of the Council of Ministers, of 27 June 2001, on the assessment of the effects of certain plans and programmes on the environment (the Strategic Environmental Assessment Directive) requires that information is provided on 'any existing environmental problems which are relevant to the plan or programme', thus, helping to ensure that the proposed strategic action does not make existing environmental problems worse.

Environmental problems arise where there is a conflict between current environmental conditions and ideal targets. If environmental problems are identified at the offset they can help focus attention on important issues and geographical areas where environmental effects of the plan or programme may be likely.

### Environmental Vectors

Environmental vectors are environmental components, such as air, water or soil, through which contaminants or pollutants, which have the potential to cause harm, can be transported so that they come into contact with human beings.

### Mitigate

To make or become less severe or harsh.

### Mitigation Measures

Mitigation measures are measures envisaged to prevent, reduce and, as fully as possible, offset any significant adverse impacts on the environment of implementing a human action, be it a plan, programme or project. Mitigation involves ameliorating significant negative effects. Where there are significant negative effects, consideration should be given in the first instance to preventing such effects or, where this is not possible, to lessening or offsetting those effects. Mitigation measures can be roughly divided into those that: *avoid* effects; *reduce* the magnitude or extent, probability and/or severity of effects; *repair* effects after they have occurred; and, *compensate* for effects, balancing out negative impacts with other positive ones.

## **Protected Structure**

Protected Structure is the term used in the Planning Act of 2000 to define a structure included by a planning authority in its Record of Protected Structures. Such a structure shall not be altered or demolished in whole or part without obtaining planning permission or confirmation from the planning authority that the part of the structure to be altered is not protected.

## **Recorded Monument**

A monument included in the list and marked on the map which comprises the Record of Monuments and Places that is set out county by county under Section 12 of the National Monuments (Amendment) Act, 1994 by the Archaeological Survey of Ireland. The definition includes Zones of Archaeological Potential in towns and all other monuments of archaeological interest which have so far been identified. Any works at or in relation to a recorded monument requires two months notice to the Department of the Environment, Heritage and Local Government under section 12 of the National Monuments (Amendment) Act, 1994.

## **Scoping**

Scoping is the process of determining what issues are to be addressed, and setting out a methodology in which to address them in a structured manner appropriate to the plan or programme. Scoping is carried out in consultation with the appropriate bodies.

## **Strategic Actions**

Strategic actions include: *Policies*, which may be considered as inspiration and guidance for action and which set the framework for plans and programmes; *Plans*, sets of co-ordinated and timed objectives for the implementation of the policy; and, *Programmes*, sets of projects in a particular area.

## **Strategic Environmental Assessment (SEA)**

Strategic Environmental Assessment (SEA) is the formal, systematic evaluation of the likely significant environmental effects of implementing a plan or programme before a decision is made to adopt it.

## **Strategic Environmental Objective (SEO)**

Strategic Environmental Objectives (SEOs) are methodological measures which are developed from international, national and regional policies which generally govern environmental protection objectives and against which the environmental effects of the Plan can be tested. The SEOs are used as standards against which the objectives of the Plan can be evaluated in order to help identify areas in which significant adverse impacts are likely to occur, if not mitigated.

# Section 1 SEA Introduction and Background

## 1.1 Introduction and Terms of Reference

This is the Environmental Report of the Strategic Environmental Assessment (SEA) of the Sligo and Environs Development Plan 2010-2016. The purpose of the report is to provide a clear understanding of the likely environmental consequences of decisions regarding the future accommodation of development in Sligo and Environs.

The SEA has been carried out in order to comply with the provisions of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004) and in order to improve planning and environmental management of future development in Sligo and Environs. This report should be read in conjunction with the Development Plan. The SEA is the responsibility of Sligo Borough Council and Sligo County Council.

## 1.2 SEA Definition

Environmental assessment is a procedure that ensures that the environmental implications of decisions are taken into account before the decisions are made. *Environmental Impact Assessment*, or EIA, is generally used for describing the process of environmental assessment which is limited to individual projects such as waste incinerators, housing developments or roads while *Strategic Environmental Assessment*, or SEA, is the term which has been given to the environmental assessment of plans, and other strategic actions, which help determine what kind of individual projects take place.

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

The kind of development that occurs in Sligo and Environs and where it occurs will be

significantly determined by the implementation of the Development Plan. By anticipating the effects and avoiding areas in which growth cannot be sustainably accommodated and by directing development towards more compatible and robust receiving environments real improvements in environmental management and planning can occur in Sligo and Environs - planning applications are more likely to be granted permission and the scope of any EIAs which may be required as part of any planning applications are likely to be reduced.

## 1.3 Legislative Context

Directive 2001/42/EC of the European Parliament and of the Council of Ministers, of 27 June 2001, on the assessment of the effects of certain plans and programmes on the environment, referred to hereafter as the SEA Directive, introduced the requirement that SEA be carried out on plans and programmes which are prepared for a number of sectors, including land use planning. The SEA Directive was transposed into Irish Law through the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (Statutory Instrument Number (SI No.) 435 of 2004) and the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004). Both sets of Regulations became operational on 21 July 2004.

## 1.4 Implications for Sligo Borough and County Councils and the Elected Members

The above legislation requires certain plans and programmes which are prepared by Sligo Borough and County Councils - including the Sligo and Environs Development Plan - to undergo SEA. The findings of the SEA are expressed in the Environmental Report which has been submitted to the Elected Members alongside the Plan. The Elected Members had to take account of the Environmental Report before the adoption of the Plan.

After the adoption of the Plan, a statement is prepared and made public, summarising, inter alia: how environmental considerations have been integrated into the Plan; and, the reasons for choosing the Plan as adopted over other alternatives detailed in the Environmental Report.

## Section 2 SEA Methodology

### 2.1 Introduction

This section details how the SEA for the Sligo and Environs Development Plan has been undertaken alongside the preparation of the Plan. The SEA process started in May 2008 and

this report has been produced in November 2009.

Figure 2.1 lays out the main stages in the Plan preparation/SEA process.

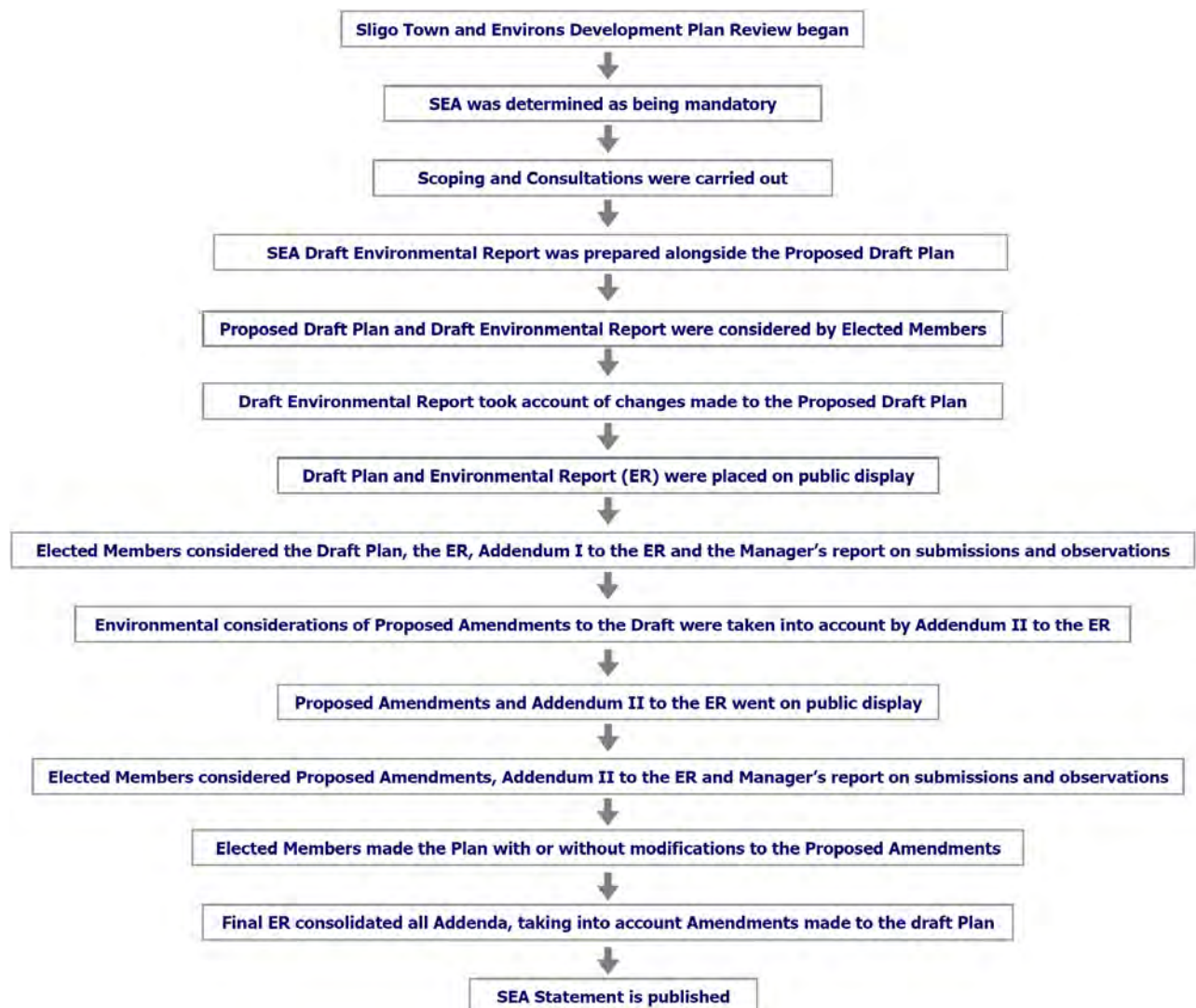


Figure 2.1 Development Plan and SEA Stages

## 2.2 Scoping

In consultation with the relevant authorities, the scope of environmental issues to be dealt with by the SEA together with the level of detail to which they are to be addressed was broadly decided on after preliminary data collection. Scoping of the SEA was continuous with certain issues being selected for further examination after certain data was obtained. Scoping helped the SEA to become focused upon the important issues, such as those relating to existing and potential environmental issues and environmental problems<sup>1</sup>, thereby avoiding resources being wasted on unnecessary data collection.

Scoping facilitated the selection of issues relevant to the environmental components which are specified under the SEA Directive - biodiversity, fauna, flora, population, human health, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, and landscape.

With regard to human health, impacts relevant to the SEA are those which arise as a result of interactions with environmental vectors (i.e. environmental components such as air, water or soil through which contaminants or pollutants, which have the potential to cause harm, can be transported so that they come into contact with human beings). Impacts upon human beings arising as a result of social and economic conditions are not considered by SEA.

Consultations were held with: the Environmental Protection Agency (EPA); the Department of the Environment, Heritage and Local Government (DEHLG); and, the Department of the Department of Communications, Marine and Natural Resources (DCMNR). In addition, the

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<sup>1</sup> Annex I of the SEA Directive requires that information is provided on 'any existing environmental problems which are relevant to the plan or programme', thus, helping to ensure that the proposed strategic action does not make existing environmental problems worse.

Environmental problems arise where there is a conflict between current environmental conditions and ideal targets. If environmental problems are identified at the offset they can help focus attention on important issues and geographical areas where environmental effects of the plan or programme may be likely.

Councils' intention to carry out SEA as part of the review of the Sligo and Environs Plan was identified during the pre-draft consultation process.

The most important strategic environmental issues in Sligo and Environs were identified as follows:

- The compliance of the Garavogue River, Lough Gill, Sligo Harbour and the area's underlying groundwater with the objectives of the Water Framework Directive;
- Waste water treatment infrastructure capacity;
- The protection of: ecological sites designated under the Habitats Directive including Lough Gill SAC and NHA, and Sligo Harbour SPA; and, the protection of Shellfish Growing Areas in Sligo Harbour;
- The removal and deposition of dredged material - which may include contaminated soils - and the remediation of contaminated sites in the Docklands area<sup>2</sup>;
- The avoidance of incompatible development in areas at risk of flooding; and,
- The protection of archaeological heritage and sensitive landscape features.

The findings of the SEA were communicated to the plan making team on an ongoing basis from the outset in order to allow for their integration into the Plan thus minimising the potential for significant negative environmental effects arising from implementation of the Plan.

## 2.3 Environmental Baseline Data and Other Strategic Actions

The SEA process is informed by the environmental baseline (i.e. the current state of the environment - flora and fauna, soil, water,

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<sup>2</sup> This will also be addressed by the upcoming Docklands LAP SEA



cultural heritage etc.) to facilitate: the identification and evaluation of the likely significant environmental effects of implementing the Plan and the alternatives; and, the subsequent monitoring of the effects of the Plan as adopted. Data was collected to describe the environmental baseline and its likely evolution without implementation of the Plan.

The SEA Directive requires that information is provided on 'any existing environmental problems which are relevant to the plan or programme'. Information is therefore provided on existing environmental problems which are relevant to the Plan, thus helping to ensure that the Plan does not exacerbate any existing environmental problems in the Town or Environs.

The SEA Directive requires that information on the baseline environment be focused upon the relevant aspects of the environmental characteristics of areas likely to be significantly affected and the likely evolution of the current environment in the absence of the strategic action i.e. the Plan. Any information that does not focus upon this is surplus to requirements; therefore the SEA focuses on the significant issues, disregarding the less significant ones. In addition, the SEA Directive aims to avoid duplication of the assessment whereby a strategic action forms part of a hierarchy. Furthermore, if certain matters are more appropriately assessed at different levels of the hierarchy in which the Plan is positioned, or, if certain matters have already been assessed by a different level of the hierarchy then additional assessment is not needed.

In order to describe the baseline (the current state of the environment) in Sligo and Environs, data was collated from currently available, relevant environmental sources.

## **2.4 Alternatives**

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.

Taking into account the objectives and the geographical scope of the Plan, alternatives were formulated through consultation with the

plan-making team at Sligo County Council and a number of departments at the Council.

## **2.5 The SEA Environmental Report**

In this Environmental Report, which was placed on public display alongside the Draft Plan, the likely environmental effects of the Plan and the alternatives are predicted and their significance evaluated with regard to the environmental baseline. The Environmental Report provided the decision-makers, the Elected Members of Sligo County Council and Sligo Borough Council, who decided whether or not to adopt the Plan, as well as the public, with a clear understanding of the likely environmental consequences of decisions regarding the future accommodation of growth in Sligo and Environs. Mitigation measures to prevent or reduce significant adverse effects posed by the Plan, or to maximise any benefits arising, were recommended for integration into the Draft Plan. The alternatives are also presented in this report, as are measures concerning monitoring.

The Environmental Report had to be updated in order to take account of changes which were made to the Draft Plan after it was put on public display and before it was adopted.

## **2.6 The SEA Statement**

After the adoption of the Plan a document referred to as the SEA Statement is prepared and made public. The SEA Statement includes information on: how environmental considerations have been integrated into the Plan - highlighting the main changes to the Plan which resulted from the SEA process; how the Environmental Report and consultations have been taken into account - summarising the key issues raised in consultations and in the Environmental Report and indicating what action, if any, was taken in response; and, the reasons for choosing the Plan in the light of the other alternatives, identifying the other alternatives considered, commenting on their potential effects and explaining why the Plan was selected.

## 2.7 Legislative Conformance

This report complies with the provisions of the SEA Regulations and is written in accordance with Schedule 2B of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004).

Table 2.1 (overleaf) is a reproduction of the checklist of information to be contained in the Environmental Report (DEHLG, 2004)<sup>3</sup> and includes the relevant sections of this report which deal with these requirements.

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<sup>3</sup> DEHLG (2004) *Implementation of SEA Directive (2001/42/EC): Guidelines for Regional Authorities and Planning Authorities* Dublin: Government of Ireland.

<b>Information Required to be included in the Environmental Report</b>	<b>Corresponding Section of this Report</b>
(A) Outline of the contents and main objectives of the Plan, and of its relationship with other relevant plans and programmes	Sections 4 and 5
(B) Description of relevant aspects of the current state of the environment and the evolution of that environment without implementation of the Plan	Section 3 and Appendix I
(C) Description of the environmental characteristics of areas likely to be significantly affected	Sections 3, 4, 7 and 8
(D) Identification of any existing environmental problems which are relevant to the Plan, particularly those relating to European protected sites	Section 3
(E) List environmental protection objectives, established at international, EU or national level, which are relevant to the Plan and describe how those objectives and any environmental considerations have been taken into account when preparing the Plan	Sections 4, 6, 7 and 9
(F) Describe the likely significant effects on the environment	Section 7 and 8
(G) Describe any measures envisaged to prevent, reduce and as fully as possible offset any significant adverse environmental effects of implementing the Plan	Section 9
(H) Give an outline of the reasons for selecting the alternatives considered, and a description of how the assessment was undertaken (including any difficulties)	Sections 2, 6 and 7
(I) A description of proposed monitoring measures	Section 10
(J) A non-technical summary of the above information	Appendix II
(K) Interrelationships between each Environmental topic	Addressed as it arises within each Section

**Table 2.1 Checklist of Information included in this Environmental Report**

## 2.8 Difficulties Encountered

### 2.8.1 Centralised Data Source

The lack of a centralised data source that could make all environmental baseline data for Sligo and Environs area both readily available and in a consistent format posed a significant difficulty to the SEA process. This difficulty is one which is encountered at local authorities across the country and was overcome by investing time in the collection of data from various sources and through the use of Geographical Information Systems.

### 2.8.2 Water Framework Directive Risk Assessments

The current Water Framework Directive (WFD) risk assessments for bodies within and surrounding Sligo and Environs (see Section 3.5) were carried out in 2005 and did not take into consideration either improvements in waste water collection and treatment arising from completion of various schemes or declines in water quality as a result of inappropriate waste water treatment from new developments. The assessments were "snap shots" of the situation at that time and only considered waste water treatment plants which were operational, known combined storm overflows and water quality monitoring results up to and until 2005.

The improvements in waste water treatment and collection make it more likely that some waterbodies within the area would achieve their requirements under the WFD whereas any declines would make it less likely that waterbodies would achieve their requirements under the WFD. Therefore, as a result of considering these improvements, the current risk assessments for some waterbodies may be changed.

At the time of publication of the Draft Plan and Environmental Report, no WFD risk assessment classification for the Garavogue River was available from the relevant authorities. Consultation with the EPA however established that it is likely that the classification of the Garavogue River is *(1b) probably at significant risk* of not achieving WFD objectives by 2015.

### 2.8.3 Rising Sea Levels

The EPA's 'Climate Change: Scenarios and Impacts for Ireland' (2003)<sup>4</sup> provides maps showing three sea level rise scenarios applied to selected areas around the Irish coastline however Sligo is not included in this mapping (3.6.4.2).

Although mapping is not available for Sligo it is noted that the examples provided in this report demonstrate that rising sea levels could place certain coastal areas of land at risk. The report also provides recommendations for integration into land use plans, a number of which have been recommended as part of this SEA.

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<sup>4</sup> Department of Geography, National University of Ireland, Maynooth (2003) *Environmental RTDI Programme 2000–2006 Climate Change: Scenarios and Impacts for Ireland (2000-LS-5.2.1-M1) Final Report* Wexford: Environmental Protection Agency

## Section 3 Sligo and Environs' Baseline Environment

### 3.1 Introduction

The environmental baseline of Sligo and Environs is described in this section. This baseline together with the Strategic Environmental Objectives, which are outlined in Section 4, is used in order to identify, describe and evaluate the likely significant environmental effects of implementing the Plan and in order to determine appropriate monitoring measures.

The environmental baseline is described in line with the legislative requirements, encompassing the following components – biodiversity, flora and fauna, population, human health, soil, water, air and climatic factors, material assets, cultural heritage, landscape and the interrelationship between these components. A description is also included of the likely effects upon each environmental component under a *do-nothing scenario* i.e. the likely evolution of the environment without the implementation of the Development Plan.

Sligo is the largest town in the North-West of Ireland. Situated at the mouth of the Garavogue River, flowing from Lough Gill, it is surrounded by mountains - Benbulbin (526m) and Truskmore (645m) to the north, Knocknaera to the West and the Ox Mountains to the south. The locations of Sligo and County Sligo are mapped on Figure 3.1.

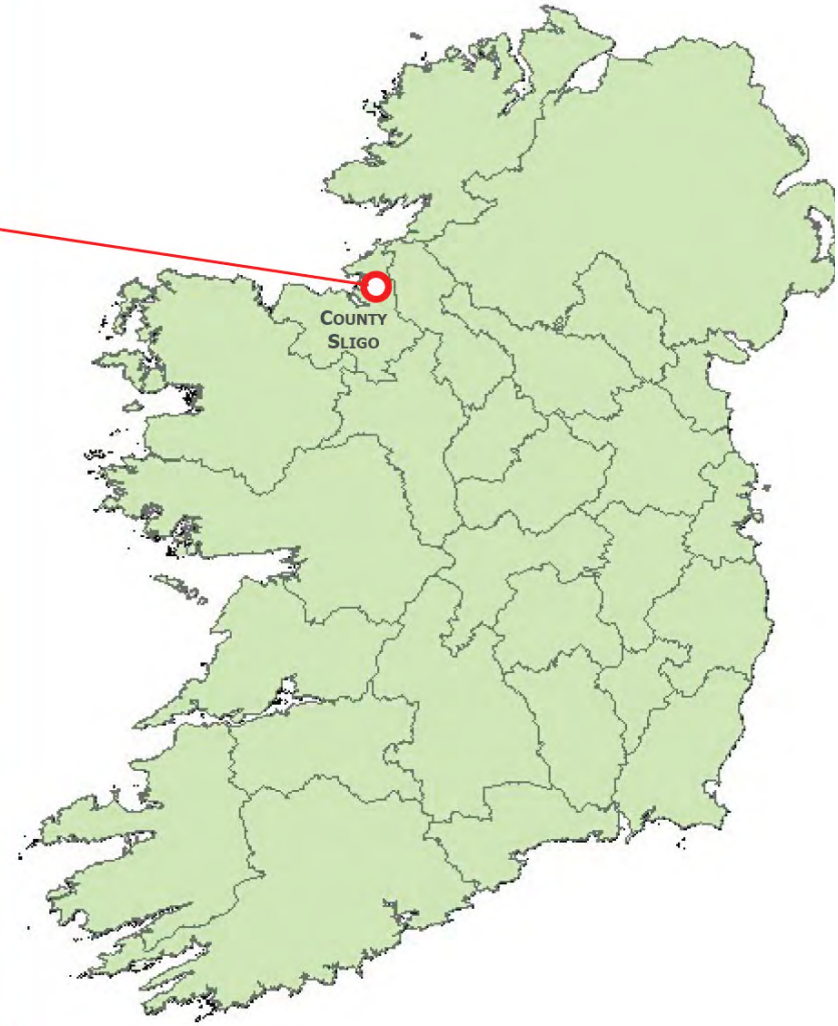


Figure 3.1 Sligo and Environs Context Map

CAAS for Sligo Borough Council and Sligo County Council



## 3.2 Biodiversity and Flora and Fauna

### 3.2.1 Overview of the Habitats

Sligo and Environs support a wide diversity of natural and semi-natural habitats. These habitats support a wide range of wild plant and animal species, which are coming under threat due to development pressures and the increasing demand for new development land. These lands include significant expanses of fresh and salt water and associated habitats, along the Garvogue River, Lough Gill and Sligo Bay.

The Garavogue River runs east to west to through the heart of Sligo interacting with both the natural and built heritage to give a unique and distinct character. The Garavogue River flows from Lough Gill into Sligo Harbour and subsequently Sligo Bay which is a candidate Special Area of Conservation (cSAC), Special Protection Area (SPA) and a proposed National Heritage Area (pNHA). Large areas of mixed and natural woodland are situated on the banks of the Garvogue at Hazelwood Demesne, Cleveragh Demesne, Tobernalt Bay and Aghamore, to the south of Aghamore Bay.

Man-made habitats within the Town are also important biodiversity areas. Gardens provide habitats for a range of wildlife including various bird species, invertebrates, such as bees and butterflies and mammals, such as hedgehogs, mice, rats and foxes. These species move around between gardens using hedgerows and vegetated areas. These urban green spaces, however small, are therefore of importance as they form part of a network of green spaces across the Plan area including gardens, parks, graveyards, amenity walks, railway lines and patches of woodland and scrub within which animals and plants continue to thrive.

#### 3.2.1.1 CORINE Land Cover Mapping<sup>5</sup>

The CORINE land cover mapping 1990<sup>6</sup> for the Sligo and Environs Plan area (see Figure 3.2), which classifies land cover under various headings, indicates *pastures* to be the chief land use within the Plan area. Much of the surrounding lands were attributed with this land use also. A region of *continuous urban fabric* exists at the Town Centre surrounded by areas of *discontinuous urban fabric*, particularly to the south, west and north west. Areas of *broad leafed forest* exist along the banks of the Garavogue River at Hazelwood Demesne and Cleveragh Demesne.

The CORINE land cover mapping 2000<sup>7</sup> for the Sligo and Environs Plan area (see Figure 3.3) indicates that the main land cover for the Plan area is *continuous urban fabric* at the Town Centre and *discontinuous urban fabric* which surrounds it. While it is the predominant land cover outside the Plan area, *pastures* also make up a large portion of the land cover within the Plan area. Small patches of *non-irrigated arable land* lie along the north western and north eastern parts of the boundary. *Broad leafed forests* exist along the banks of the Garavogue River to the east of the Plan area. Lands to the east and south east of the Plan area are predominantly made up of *moors and heath*, *peat bogs*, *inland marshes* and *transitional woodland scrub*. An area of *road and rail networks* traverses the southern Plan boundary.

Land cover differences between the CORINE 1990 data and the data for the year 2000 (see Figure 3.4) show that lands which were used in

<sup>5</sup> CORINE Land Cover (CLC) is a map of the European environmental landscape based on interpretation of satellite images. Land cover is the observed physical cover, as seen from the ground or through remote sensing, including for example natural or planted vegetation, water and human constructions which cover the earth's surface. Because of the scale of the CORINE data and the method by which it was collected there are likely to be a number of inaccuracies at the local level. It is noted, however, that the land cover shown on the maps is generally accurate. The European Environment Agency, in conjunction with the European Space Agency, the European Commission and member countries is currently updating the CORINE land cover database.

<sup>6</sup> European Environment Agency Coordination of Information on the Environment (2004) *Ireland's Corine Land Cover 2000 (CLC2000)* Copenhagen: EEA

<sup>7</sup> European Environment Agency Coordination of Information on the Environment (2004) *Ireland's Corine Land Cover 2000 (CLC2000)* Copenhagen: EEA

1990 as *pastures* are now attributed to *non-irrigated arable land, road and rail networks and associated lands, complex cultivation patterns* or have undergone *urbanisation*. An area of *broad leaved forest* along the banks of the Garavogue River has been cleared for *pasture*.

These differences between 1990 and 2000 land cover indicate a cumulative loss of areas of natural/agricultural vegetation and associated habitats - and their flora and fauna.

### 3.2.1.2 Habitat Mapping

Habitat mapping<sup>8</sup> of the Sligo and Environs Plan area took place in 2007 to 2008 as part of the County Sligo Heritage Plan 2007-2011. The results, arising from both on-screen and field surveyed habitat coding, can be seen on Figure 3.7 below. 34 sites of local biodiversity value and wildlife corridors in the Sligo and Environs area have been identified as a result of this mapping. These sites comprise, inter alia, wetlands, woodlands, grassland and scrub.

It is noted that a wetlands survey for the area is on-going. Phase I (2008) is complete and the fieldwork for Phase II has been completed.

## 3.2.2 Ecological Networks

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

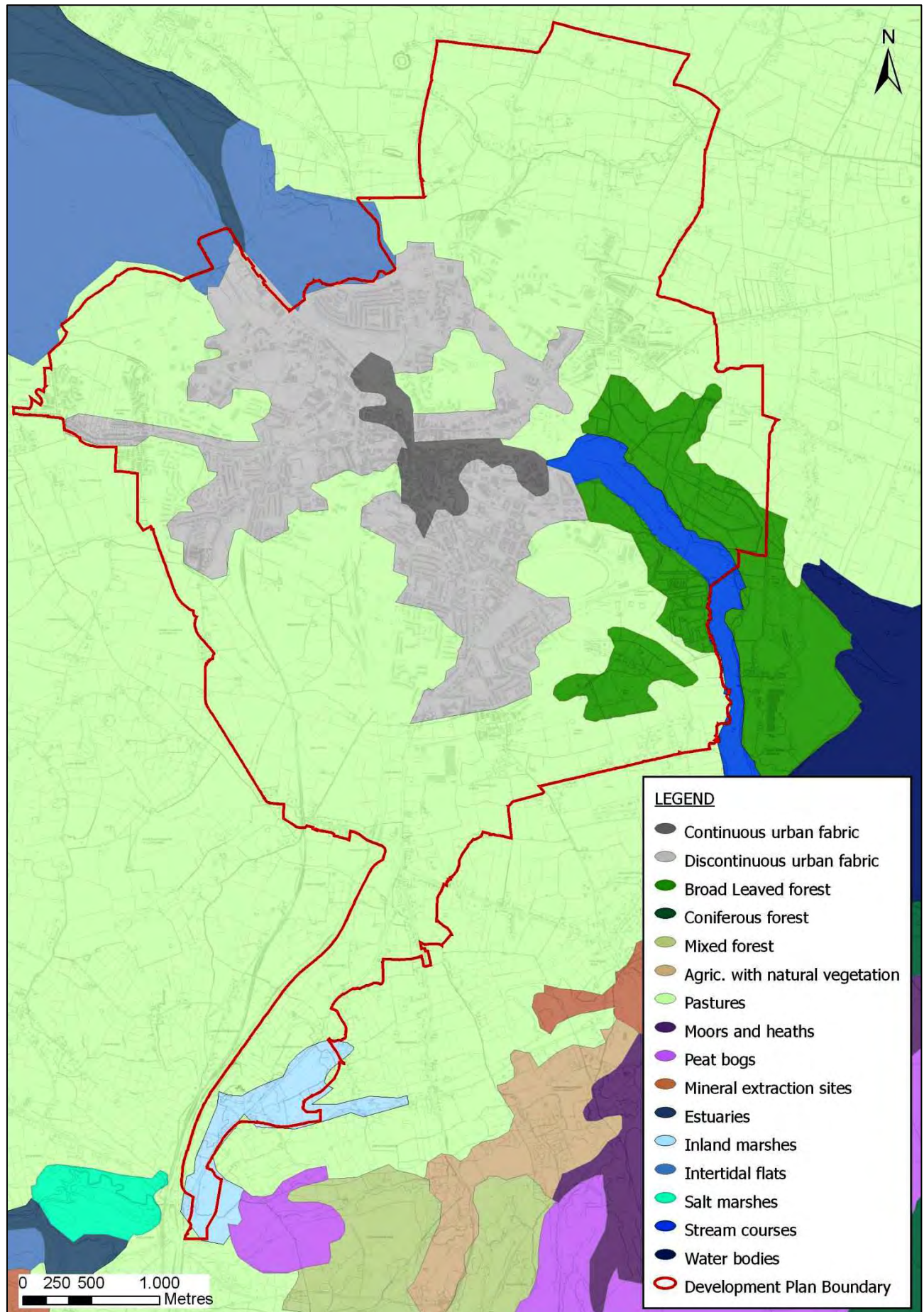
The Garavogue River, its tributaries, banks, hedgerows and lands used for agriculture and the wider Sligo Harbour area contribute to the ecological network of which Sligo is part, facilitating linkages both between and within designated ecological sites, the non-designated surrounding countryside and the more urban areas of the Town.

Figure 3.6<sup>9</sup> maps field boundaries within the Sligo area. These boundaries, comprising mainly of hedgerows and river banks indicate some of the ecological networks within in the Plan area.

<sup>8</sup> McCorry, M. (2008) *Sligo and Environs Habitat Map Report*, Unpublished Report for Sligo County Council

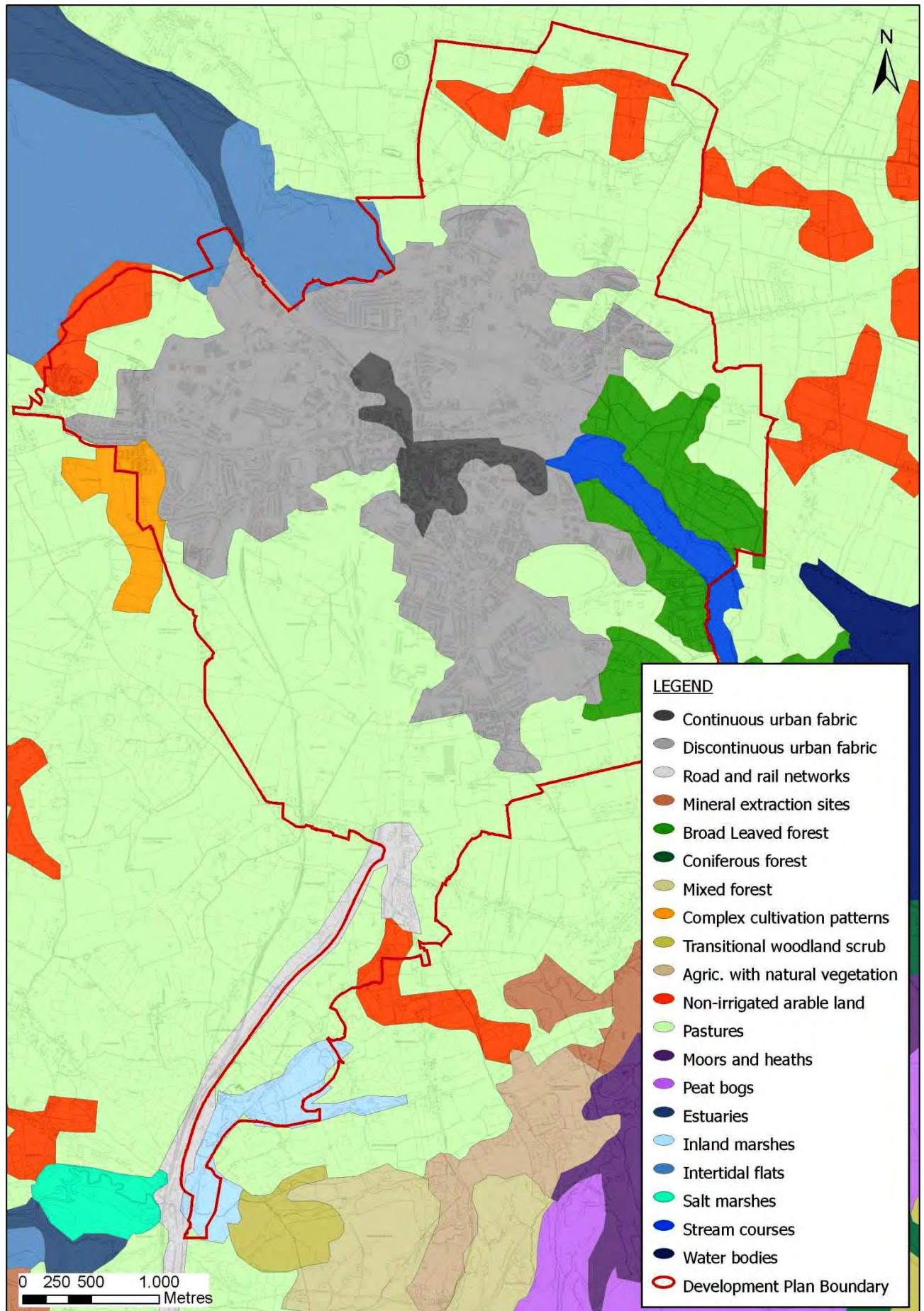
<sup>9</sup> Sligo County Council (unknown) *Field Boundaries GIS dataset* Sligo: Sligo County Council





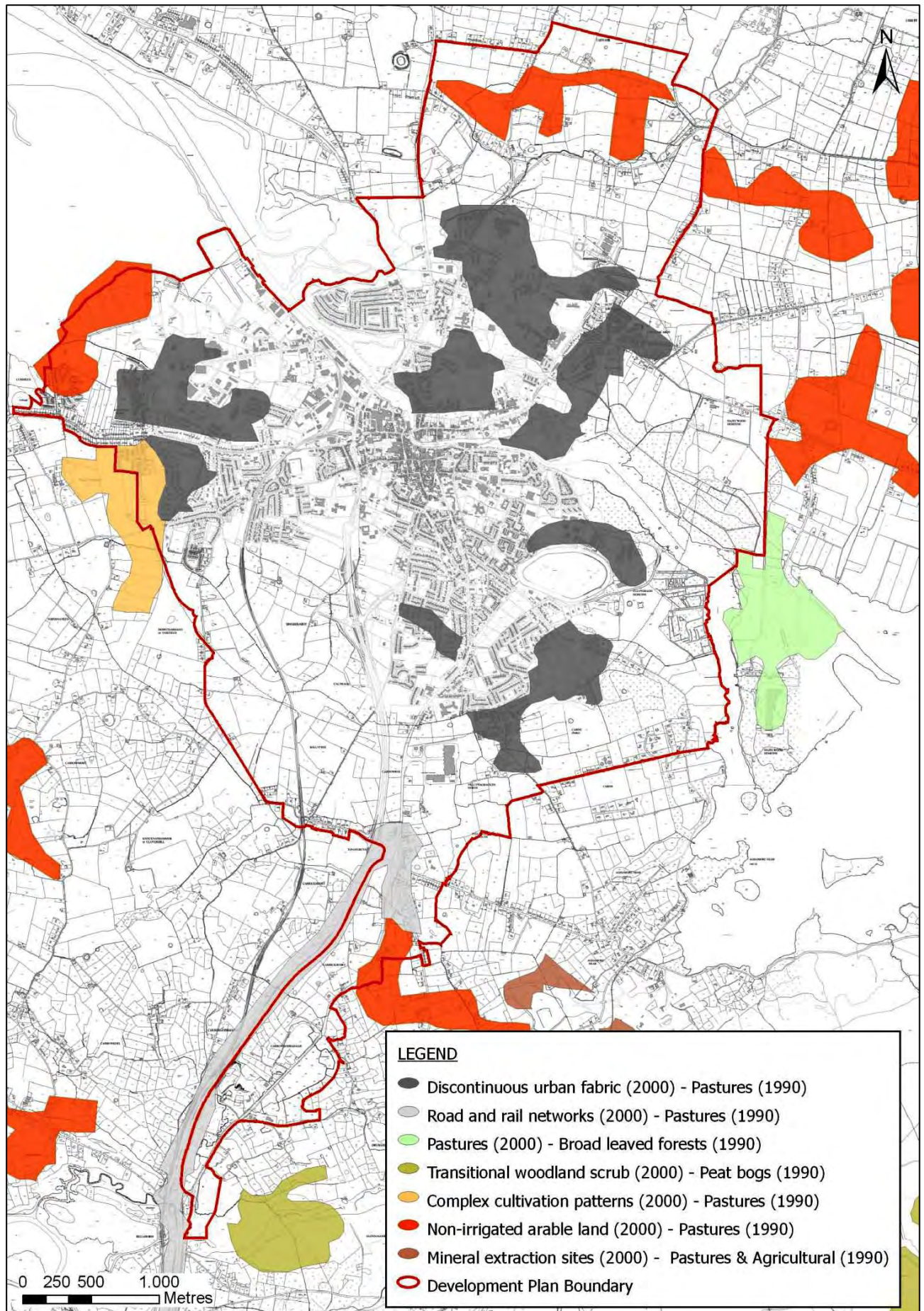
**Figure 3.2 CORINE Land Cover 1990**





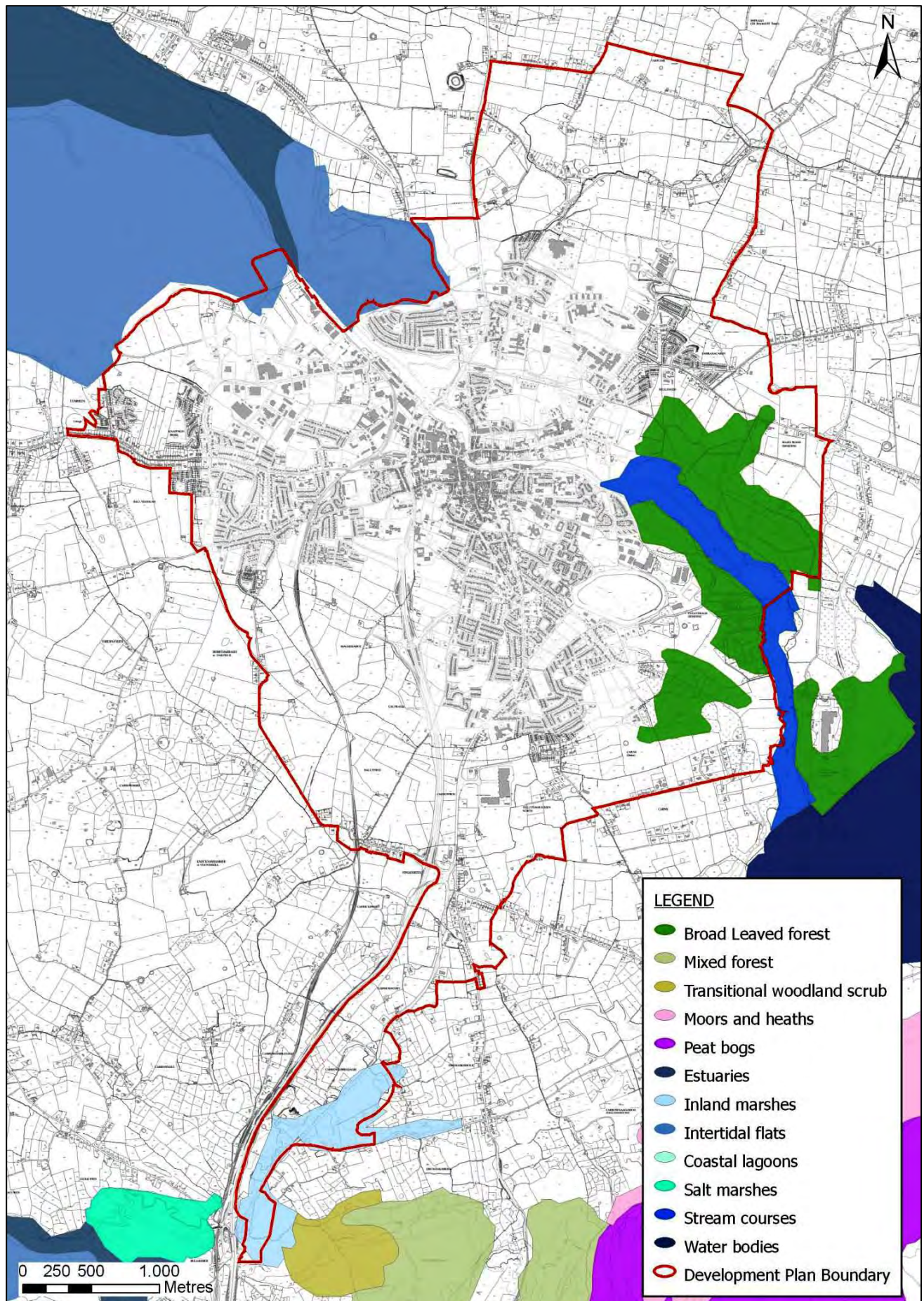
**Figure 3.3 CORINE Land Cover 2000**





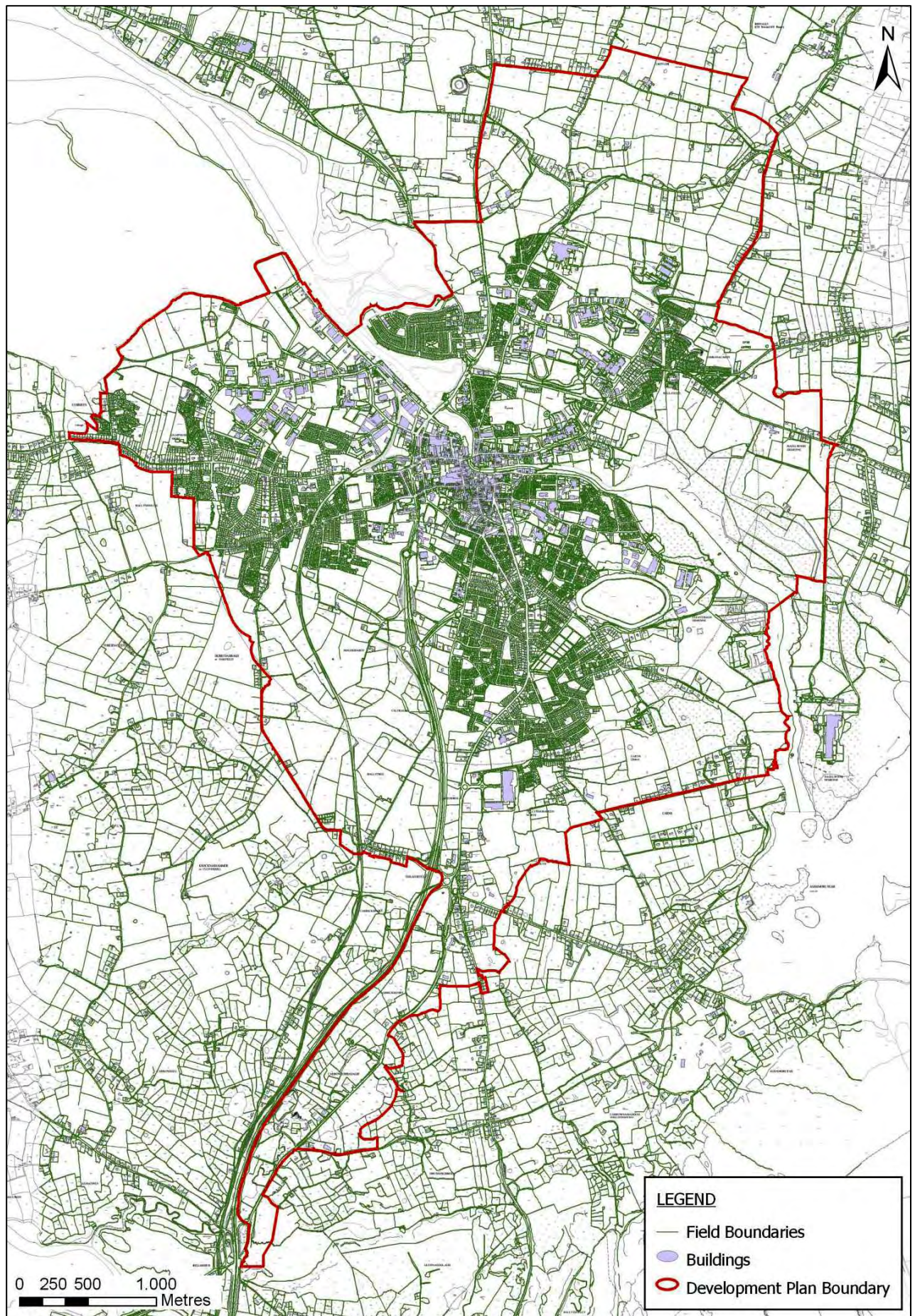
**Figure 3.4 CORINE Land Cover Changes 1990 - 2000**





**Figure 3.5 CORINE Land Cover Categories which indicate lands which are likely to be most valuable to biodiversity**





**Figure 3.6 Field Boundaries within the Sligo area**



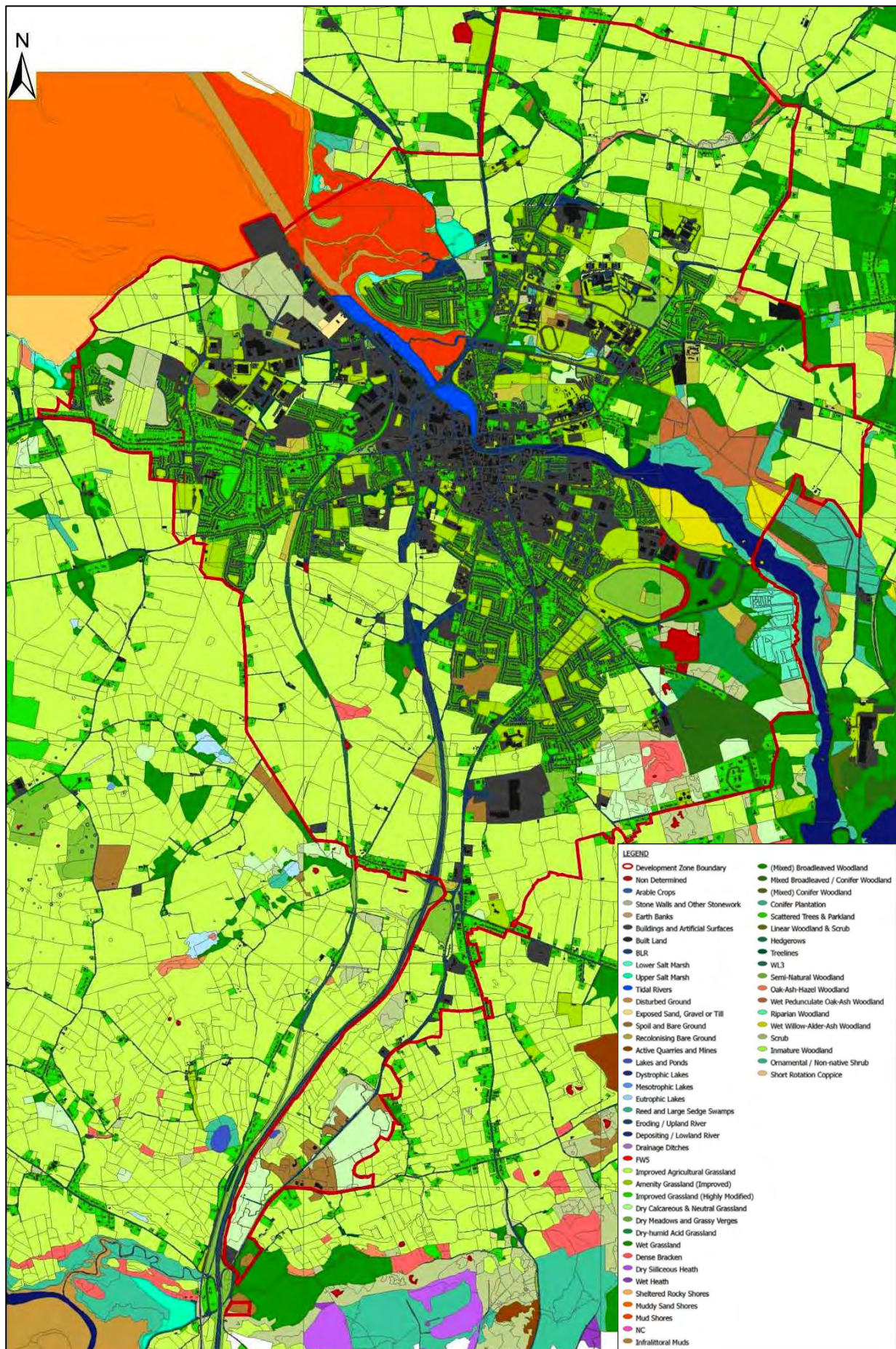


Figure 3.7 Habitat Mapping

### 3.2.3 Designations

#### 3.2.3.1 Introduction

Cummeen Strand/Drumcliff Bay proposed Natural Heritage Area (pNHA), Special Area of Conservation (SAC) and Special Protection Area (SPA) traverse the north west Plan boundary and continues out as far as Coney Island. Lough Gill pNHA and cSAC lies to the east of the Plan area. The Garvogue River, which spans the Plan area until it enters the sea at Sligo Harbour, forms part of this designation. Ballysadare Bay pNHA, SAC and SPA lies just outside the Plan boundary to the south east. Drumskibbole Reedbeds pNHA lies inside the Plan boundary to the south of Sligo.

It is noted that the majority of the ecological sensitivities discussed below – and associated potential for environmental impacts – occur at or beyond the fringes of the Sligo and Environs Plan area. They are included, however, to ensure that areas which could be impacted as a result of implementing the plan are identified and assessed.

#### 3.2.3.2 Special Protection Areas

Special Protection Areas (SPAs) have been selected for protection under the 1979 European Council Directive on the Conservation of Wild Birds (79/409/EEC) by the DEHLG due to their conservation value for birds of importance in the European Union.

#### 3.2.3.3 Special Areas of Conservation

Special Areas of Conservation (SACs) have been selected for protection under the European Council Directive on the conservation of natural habitats and of wild fauna and flora (92/43/EEC) by the DEHLG due to their conservation value for habitats and species of importance in the European Union.

#### 3.2.3.4 Natural Heritage Areas

Natural Heritage Areas (NHAs) are designated due to their national conservation value for ecological and/or geological/geomorphological heritage. They cover nationally important semi-natural and natural habitats, landforms or geomorphological features, wildlife plant and animal species or a diversity of these natural attributes. NHAs are designated under the Wildlife (Amendment) Act 2000. The sites are *proposed* sites because they are currently under

consideration by the Commission of the European Union.

#### 3.2.3.5 Designated Sites

The following designated ecological sites are found within or adjacent to the Plan area:

- **Cummeen Strand/Drumcliff Bay SPA, SAC and pNHA**

Cummeen Strand/Drumcliff Bay pNHA, SAC (Site Code: 000627) and SPA (Site Code: 004035/004013) is a large shallow bay stretching from Sligo Town westwards to Coney Island.

The Bay is an important site of high conservation significance, which includes a wide variety of habitat types, including several listed on Annex I of the EU Habitats Directive, several species listed on Annex II of this Directive, large and important populations of waterfowl and seabirds, and several rare plant species.

This site is of high ornithological importance, with one species having a population of International Importance and two having populations of National Importance. In addition, there are three species that are listed on Annex I of the Birds Directive. The site is also important as a component of the much larger Sligo Bay complex.

Cummeen Strand/Drumcliff Bay pNHA, SAC and SPA is mapped on Figure 3.8<sup>10</sup>. It should be noted that the boundaries for Cummeen Strand/Drumcliff Bay pNHA, SAC and SPA are not identical. The Site Synopses<sup>11, 12 & 13</sup> for this designated site is included in Appendix I to this report.

On designation, this SAC together with the Special Protection Area (SPA) will become part of Natura 2000 - a network of protected areas

<sup>10</sup> National Parks and Wildlife (2008) *Conservation Site Boundaries* downloaded from [www.npws.ie](http://www.npws.ie), Dublin: Government of Ireland

<sup>11</sup> National Parks and Wildlife (2003) *Site Synopsis for Cummeen Strand/Drumcliff Bay Special Area of Conservation* Dublin: Government of Ireland.

<sup>12</sup> National Parks and Wildlife (2006) *Site Synopsis for Drumcliff Bay Special Protection Area* Dublin: Government of Ireland.

<sup>13</sup> National Parks and Wildlife (2003) *Site Synopsis for Cummeen Strand/Drumcliff Bay Special Area of Conservation and proposed National Heritage Area* Dublin: Government of Ireland



throughout the EU established under the Habitats Directive.

- **Lough Gill pNHA and cSAC**

Lough Gill pNHA and cSAC (Site Code: 001976) is 2 kilometres east of Sligo Town. It comprises Lough Gill with Doon Lough to the north-east, the Bonet River as far as but not including Glenade Lough, and a stretch of the Owenmore River near Manorhamilton in Co. Leitrim. Lough Gill is 8 km long, has steep limestone shores and underwater cliffs and is over 20m deep in places. The lake appears to be naturally eutrophic, and thus represents a habitat listed on Annex I of the EU Habitats Directive.

The site is of importance for three habitats listed on Annex I of the E.U. Habitats Directive, including one with priority status. It is also noted for the high number of rare animal and plant species.

Lough Gill pNHA and cSAC is mapped on Figure 3.8. The Site Synopsis<sup>14</sup> for this designated site is included in Appendix I to this report. On designation, this cSAC will also become part of Natura 2000.

A management plan for the Lough Gill Catchment was produced in 1998 for Sligo County Council. Some of the objectives included management of broad-leafed woodland for wildlife and tourism, baseline studies on water and ecological quality and management of the waters as a public water supply and fishery.

- **Ballysadare Bay pNHA, SAC and SPA**

Ballysadare Bay pNHA, SAC and SPA extends for about 10km westwards from the town of Ballysadare, County Sligo and is the most southerly of three inlets of the larger Sligo Bay. The estuarine channel of the Ballysadare River winds its way through the Bay, finally reaching the open sea near the spit at Strandhill Dunes.

Ballysadare Bay is of ecological value for its range of good quality coastal habitats. Actively developing dune systems are rare on the west coast and the sand dune system at Strandhill is of particular interest as a large and intact

<sup>14</sup> National Parks and Wildlife (2006) *Site Synopsis for Lough Gill candidate Special Area of Conservation and proposed National Heritage Area* Dublin: Government of Ireland

example of a habitat type which is under general threat from development. The rarity of intact dune systems is recognised in the listing of "Fixed Dunes" as priority habitat on Annex I of the EU Habitats Directive. The saltmarshes at Ballysadare Bay are relatively good examples for the west coast and that at Abbeytown is unusual as it is forming on quarry waste. The presence of two Annex II species within the site adds further importance. Furthermore, the Bay supports nationally important numbers of waterfowl.

Ballysadare Bay pNHA, SAC and SPA Ballysadare Bay is mapped on Figure 3.8. It should be noted that the boundaries for Cummeen Strand/Drumcliff Bay pNHA, SAC and SPA are not identical. The Site Synopses<sup>15,16</sup> for this designated site is included in Appendix I to this report. On designation, this SAC together with the SPA will become part of Natura 2000.

- **Drumskibbole Reedbeds pNHA**

Drumskibbole Reedbeds pNHA lies inside the Plan boundary to the south of Sligo Town.

The site is situated in a wet depression amongst drumlin hills about 2 kilometres north-east of Ballysadare on the main Dublin/Sligo Road. It is currently occupied by a large reedbed developed over glacial till and is fed by a calcareous spring at Pouloonaperry and by a drain which flows along the southern boundary.

Drumskibbole Reedbeds pNHA is mapped on Figure 3.8.

### 3.2.3.6 Woodlands

Large wooded areas exist along the banks of the Garavogue River at Cleaveragh Demesne on the north eastern bank and Hazelwood Demesne on the south western bank.

The report from the database of the National Inventory of Architectural Heritage (NIAH) Survey of Historic Gardens and Designed Landscapes site survey of the gardens at Cleaveragh Demesne indicates that some infilling of native species on open ground seems

<sup>15</sup> National Parks and Wildlife (2007) *Site Synopsis for Ballysadare Bay Special Protection Area* Dublin: Government of Ireland

<sup>16</sup> National Parks and Wildlife (2001) *Site Synopsis for Ballysadare Bay Special Area of Conservation and proposed National Heritage Area* Dublin: Government of Ireland



to have taken place and that some areas of screening woodland have been removed<sup>17</sup>.

The NIAH site survey carried out at the gardens of Hazelwood Demesne suggests that the woodland drive to the north of the principal building has been partly cleared of trees. Some new roads have been constructed on the site probably to facilitate timber production. Areas of parkland have been converted to timber producing areas. Timber producing woodland has been planted which is unrelated to the shape of the woodland of the designed landscape. The construction of a large modern building to the south of principal building destroyed a key view and a hexagonal walled garden.

The conservation and enhancement of biodiversity are two of the fundamental roles of the woodlands in Sligo and Environs. These woodlands offer opportunities for recreation and have psychological and social benefits. These woodlands can improve the local environment by acting as a barrier to wind and improving air quality.

### 3.2.3.7 Ramsar Sites

Ramsar sites are designated and protected under the Convention of Wetlands of International Importance, especially as Water Fowl Habitat, which was established at Ramsar in 1971 and ratified by Ireland in 1984. Ireland presently has 45 sites designated as Wetlands of International Importance, with surface areas of 66,994 hectares.

Cumeen Strand (Site No. IE034) was designated a Ramsar Site on 11 June 1996 and provides 1,491 hectares of Wetlands of International Importance. Cummeen Strand is the middle of Sligo Bay's three discrete estuarine areas. It lies at the mouth of the River Garavogue and stretches west from Sligo Town. Intertidal mud- and sandflats are the dominant habitat, with sand-dunes at Killaspug and Coney Island, and a shingle spit at Standalone Point. The estuary has been modified with the construction of a training wall.

<sup>17</sup> National Inventory of Architectural Heritage Survey of Historic Gardens and Designed Landscapes Database. Department of the Environment, Heritage and Local Government.

### 3.2.3.8 Register of Protected Areas

In response to the requirements of the Water Framework Directive a number of water bodies or parts of water bodies which must have extra controls on their quality by virtue of how their waters are used by people and by wildlife have been listed on Registers of Protected Areas (see Section 3.5.3.4).

Sligo Harbour has been listed on the RPA for Special Protection Areas (for Water Dependent Habitats and Species) and for Recreational Waters. The Garavogue River, Sligo Harbour and the groundwater underlying the Plan area are also listed on the RPA. Figure 3.23 and Figure 3.24<sup>18</sup> map the RPAs.

## 3.2.4 Existing Problems

The changes in land cover between 1990 and 2000 at a number of locations within and adjacent to the Plan area indicate a cumulative loss of regions of natural/agricultural vegetation and associated habitats - and their flora and fauna. These losses are indicated by Figure 3.4 which shows CORINE Land Cover Changes 1990-2000.

With regard to terrestrial flora and fauna, all greenfield development in the area will cause an impact - the replacement of natural and semi natural habitats with artificial surfaces results in loss of flora and fauna and therefore adversely impacts upon this environmental component.

## 3.2.5 Evolution of Biodiversity and Flora and Fauna in the absence of a Development Plan

In the absence of a Development Plan, development would have no guidance as to where to be directed and planning applications would be assessed on an individual basis with flora and fauna, habitats and ecological connectivity protected under a number of strategic actions relating to biodiversity and flora and fauna protection.

In the absence of a Development Plan there would not be an integration of the ecological protection measures required by the Habitats Directive with the planning or development

<sup>18</sup> EPA (2008) *Register of Protected Areas GIS dataset* Wexford: EPA

management of vulnerable areas. Therefore, it is likely that there would be less effective protection of ecological resources in the absence of a Plan.

The evolution of biodiversity and flora and fauna would be dependent on the rate and extent of developments which would take place.

Any future development along the edges of designated ecological sites would be likely to result in a reduction in habitats and could therefore reduce ecological connectivity on the edges of these sites.

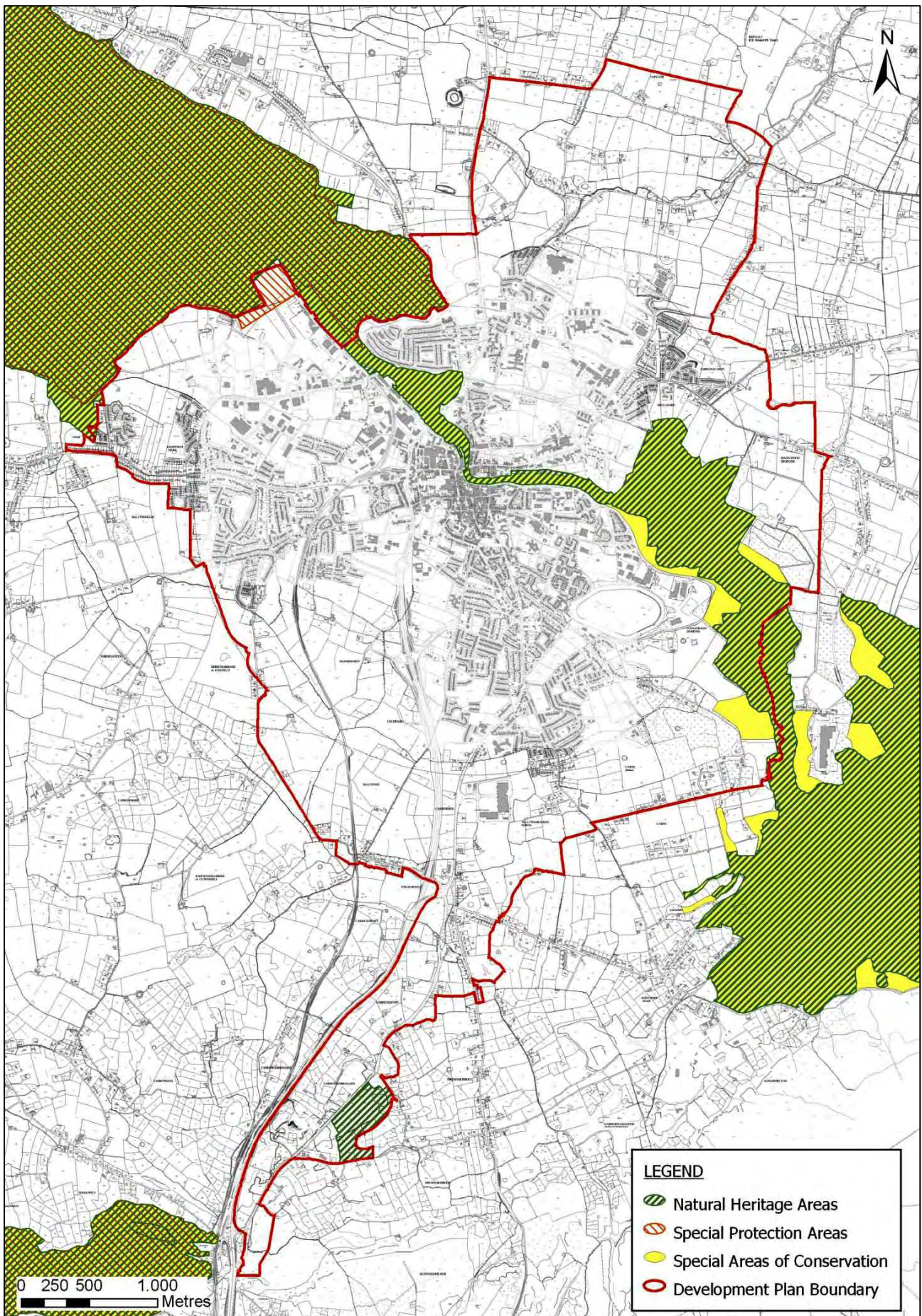
Weakly controlled development along or adjacent to the banks of rivers or on the coastline could result in a reduction in ecological connectivity within and between these and other habitats.

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

Climate change has the potential to result in the loss of habitats - including those designated as SACs and SPAs - through rising sea levels and increased levels of surface run-off. Some of the coastal habitats which are important to bird populations could eventually be inundated. Increased precipitation may disrupt the salinity gradients within estuarine systems and, coupled with likely increased sedimentation, disrupt spawning and nursery grounds as well as shellfish production and quality in such areas.

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 as a result of all greenfield developments. It is noted that development of brownfield sites and re-development could also have impacts on terrestrial flora and fauna.





**Figure 3.8 Designated Sites within and adjacent to the Plan area**



### 3.3 Population and Human Health

#### 3.3.1 Population

The population of the Plan area is approximated by the total population of the Borough and Environs from the Census, plus the population living in the suburban fringes and in the rural areas within the Plan limit. Population change for Sligo Borough and Sligo Environs over the last three intercensal periods is shown on Table 3.1.

Population for Sligo Borough in 2006 stood at 17,892 having fallen by 581 persons since the previous census carried out in 2002. This decrease shows a change in the pattern as there was an increase experienced over the previous intercensal period from 1996 to 2002 when population rose from 17,786 to 18,473, a growth of 687 persons or 3.9%. This contrasts with statistics for Sligo Environs which has seen increases in population over the last two intercensal periods. Population increased from 723 in 1996 to 1,262 in 2002 which was a 74.5% increase, this rose again to 1,510 in 2006, an increase of 248 persons or 19.7%.

As Census figures for the exact Plan area are not available, the population is approximated by the total population of the Borough and the five adjoining Electoral Divisions (Calry, Drumcliff East, Drumcliff West, Kilmacowen and Knockaree) minus the population of Strandhill, Rosses Point, Ballincar, Rathcormack and Drumcliff (estimates were used for the last two settlements). These District Electoral Divisions are mapped on Figure 3.9<sup>19</sup>. Thus, the population of Sligo was estimated at 24,755 in 2006 (a fall of 492 persons compared to 2002). For the same period, the five electoral divisions (EDs) adjoining the Borough, i.e. Calry, Drumcliff East, Drumcliff West, Kilmacowen and Knockaree, saw their combined population increase by 458 persons, from 9,321 to 9,779. This is a 4.9% increase over four years, comparable with the 8.4% increase over the six years from 1996 to 2002.

The Development Plan for Sligo and Environs is based on the High-Growth Scenario, which

suggests that Sligo Town could grow to circa 33,000 residents by the year 2016 and attain a population of 37,000 by 2020.

#### 3.3.2 Human Health

With regard to human health, impacts relevant to the SEA are those which arise as a result of interactions with environmental vectors (i.e. environmental components such as air, water or soil through which contaminants or pollutants, which have the potential to cause harm, can be transported so that they come into contact with human beings).

Human health has the potential to be impacted upon by environmental vectors including water, soil and air. Hazards or nuisances to human health can arise as a result of exposure to these vectors arising from incompatible adjacent landuses for example. These factors have been considered with regard to the description of: the baseline of each environmental component; and the identification and evaluation of the likely significant environmental effects of implementing the Plan and the alternatives.

The Air Framework Directive deals with each EU member state in terms of "Zones" and "Agglomerations". For Ireland, four zones are defined in the Air Quality Regulations (2002). Sligo Town falls under Zone C which has a current air quality status of "Very Good". This is discussed further in Section 3.6.

#### 3.3.3 Existing Problems

Certain environmental vectors within the Plan area - such as air, water or soil - have the potential to transport and deposit contaminants or pollutants, which have the potential to cause harm and adversely impact upon the health of the area's population. Issues relevant to this potential in Sligo and Environs are expanded upon in the following sections.

Increases in the Plan area's population as a result of tourism can result in increased demand being placed on water supply infrastructure, and wastewater infrastructure and increased pressures on biodiversity.

<sup>19</sup> Sligo County Council (2001) *Sligo District Electoral Divisions GIS dataset* Sligo County Council: Sligo

### 3.3.4 Evolution of Population and Human Health in the absence of a Development Plan

The growth or development of environmentally stressed areas can result in adverse effects on populations and their health. Due to the substantial predicted population increases mentioned in Section 3.3.1 above, there is a need to direct growth towards the most robust environments and away from the most sensitive ones. Such direction of development away from unsuitable receiving environments would be

unlikely to occur in the absence of a Development Plan – with resultant adverse effects on local populations and their health.

In the absence of a Development Plan there would be no framework for the provision of infrastructure to serve existing and future development and this could delay or hinder the provision of infrastructure and result in impacts on environmental vectors to which humans are exposed. For example, a lack of appropriate waste water treatment infrastructure could adversely impact upon drinking water quality and subsequently upon human health.

Area	Sligo Borough			Sligo Environs		
Census Year	1996	2002	2006	1996	2002	2006
Population	17,786	18,473	17,892	723	1,262	1,510
Population Change on Previous Census	-	687	-581	-	539	248
% Population Change on Previous Census	-	3.9	-3.1	-	74.5	19.7

**Table 3.1 Population change in Sligo Borough and Environs area over the last three intercensal periods**



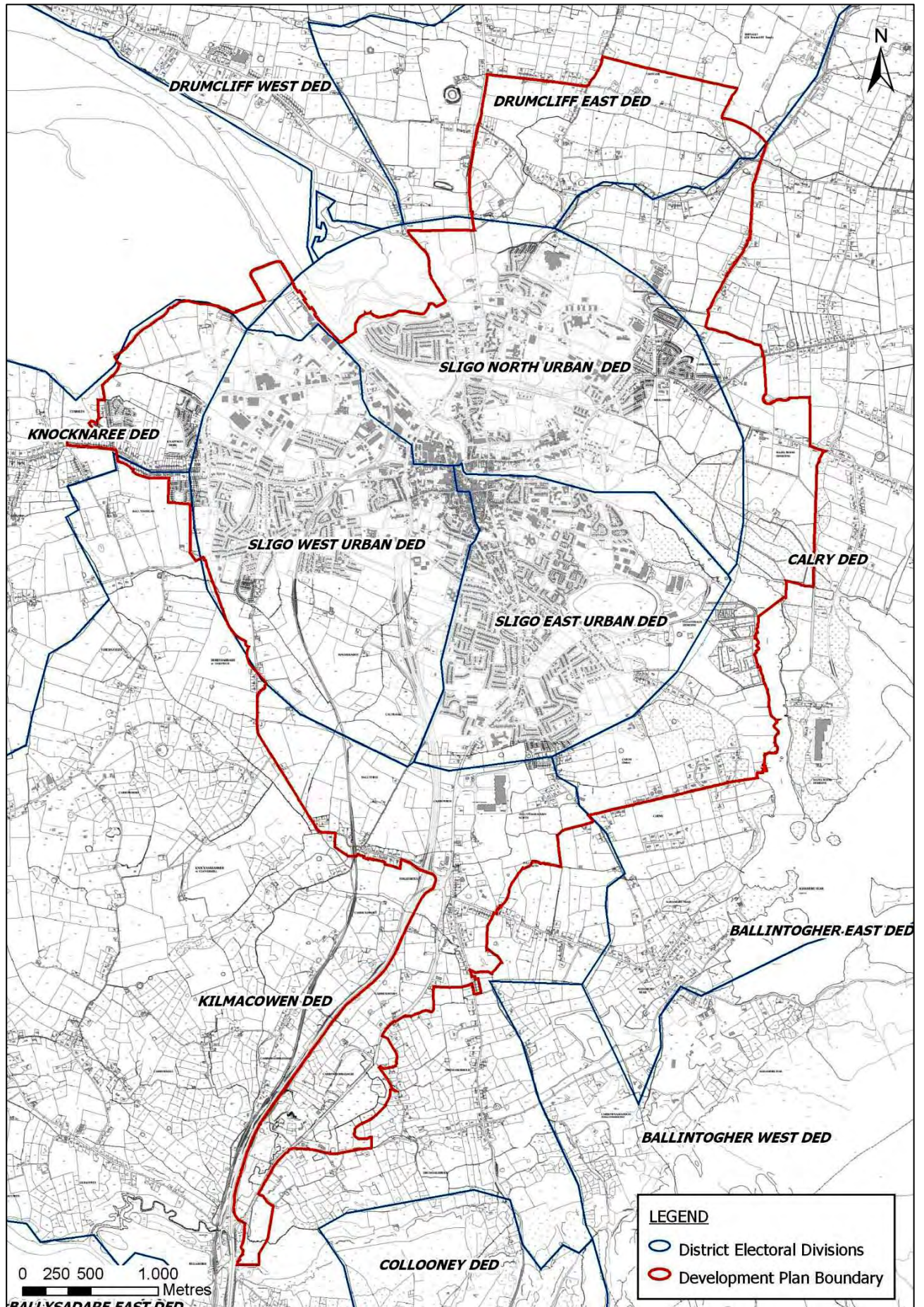


Figure 3.9 District Electoral Divisions



### 3.4 Soil

#### 3.4.1 Introduction

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

Soils in any area are the result of the interaction of various factors, such as parent material, climate, vegetation and human action.

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

#### 3.4.2 Soil Types

Soil type within and surrounding the Plan area is shown on Figure 3.10<sup>20</sup>. The majority of soils within and surrounding Plan area are *acidic mineral soils*. A large portion of the Plan areas soil is identified as being *man made*. These *urban soils* are soils which have been disturbed, transported or manipulated by man's activities in the urban environment and are often overlain by a non-agricultural, man-made surface layer that has been produced by mixing, filling, or by contamination of land surfaces in urban and suburban areas. There is an amount *alluvium* dispersed throughout the Plan area, particularly along the floodplains of the Garavogue River and the Willsborough Stream to the north. There is a large area of *cutaway peatland* to the

south west of the Town. Peats are characterised by high content of organic matter, over 30%, and by being at least 30 cm in depth. Two basically different types, blanket and basin peat, occur in the country.

#### 3.4.3 Geology

The habitats of Sligo are influenced by the County's underlying geology (see Figure 3.11<sup>21</sup>).

The majority of the Plan area is underlain with *dark fine-grained cherty limestone* with a band of *dark fine limestone and calcareous shale* to the north.

There are a four mineral extraction sites to the south east and south west the Plan area. Two quarry sites exist to the south east of the Plan area. These sites are mapped on Figure 3.12<sup>22</sup>.

#### 3.4.4 Existing Problems relating to Soil

Greenfield development involves the building upon and thereby sealing off of soil thus representing an environmental problem.

Soil has the potential to be polluted and contaminated as a result of pollution from agricultural sources and development which is not serviced by appropriate waste water infrastructure.

Soil erosion due mainly to surface erosion resulting from construction works and agricultural / forestry operations has major potential to impact on water quality and fishery resources.

In addition to water quality and fishery impacts, these can impact on infrastructure and can have health and safety implications.

#### 3.4.5 Evolution of Soil in the absence of the Development Plan

In the absence of a Development Plan for Sligo and Environs, the evolution of soil would be dependent on developments which take place.

<sup>20</sup> Dataset provided by Sligo County Council (1998) *Draft Level 1 IFS soil classification for County Sligo* Sligo County Council: Sligo

<sup>21</sup> Geological Survey of Ireland (2005) *Bedrock Geology* Dublin: Government of Ireland

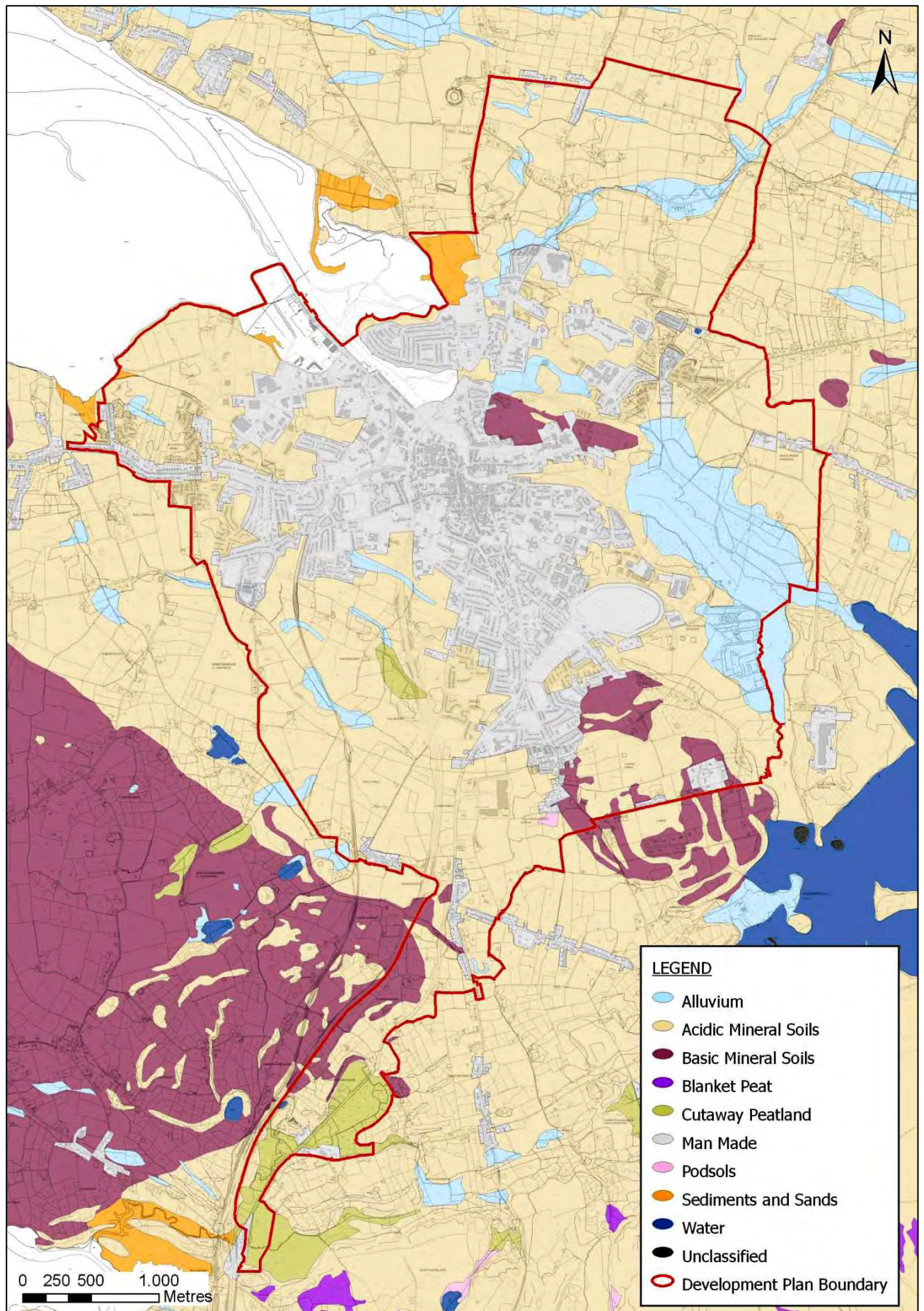
<sup>22</sup> Sligo County Council (2005) *Quarry Database for Sligo* Sligo: Sligo County Council

The currently proposed Soil Directive suggests encouraging the rehabilitation of brownfield sites, thus reducing the depletion of greenfield sites. However, in the absence of a Development Plan there would be no framework for the direction of growth towards brownfield sites in the area, where such direction is appropriate. As a result greenfield development would be likely to occur on an increased basis - both within and outside of the Plan area - and would result in the building upon and thereby

sealing off of the non-renewable subsoil and soil resources.

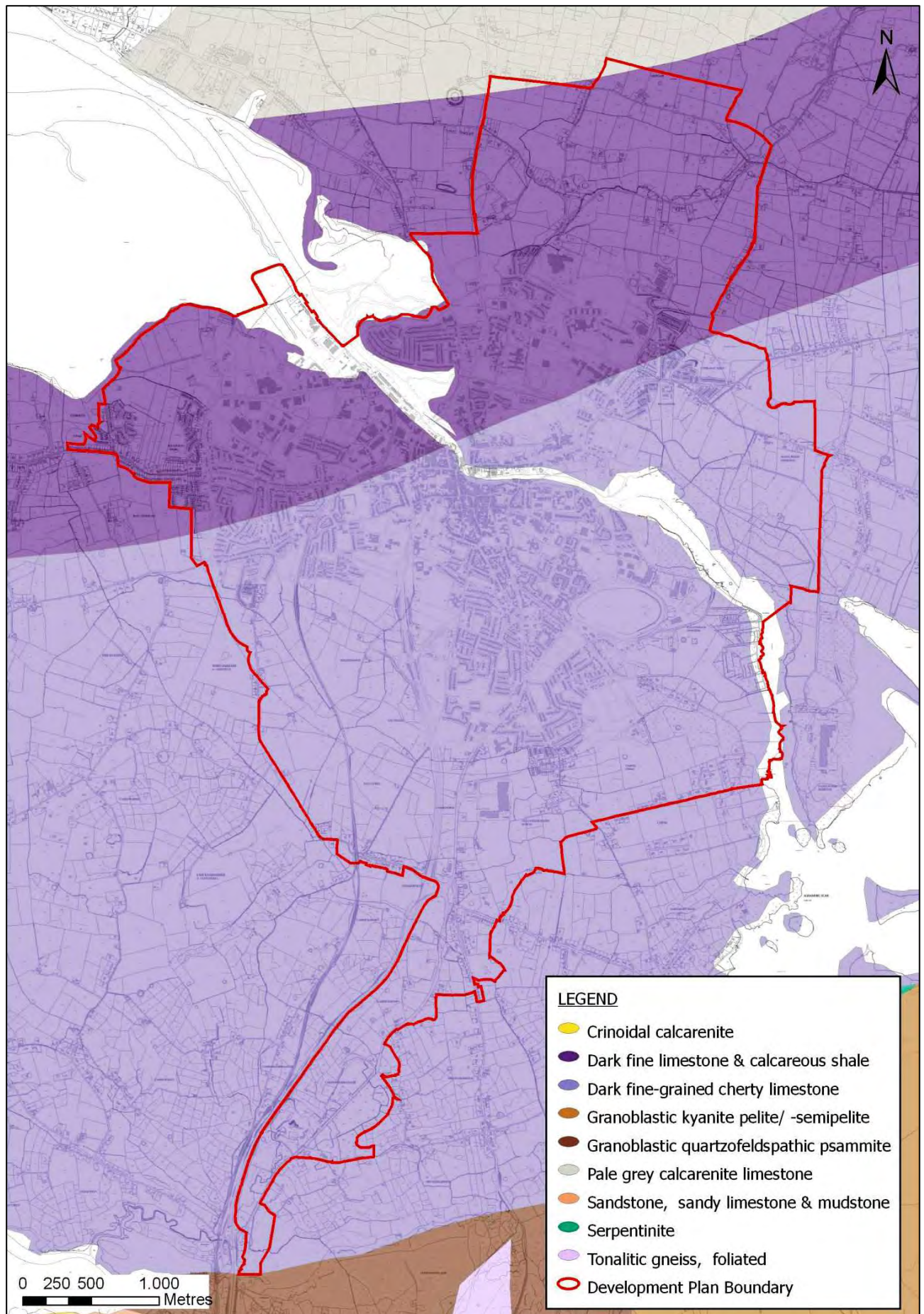
In the absence of a Development Plan there would be no framework for the provision of infrastructure - such as that relating to waste water treatment - to serve existing and future development and therefore soil would have the potential to be polluted and contaminated as a result of pollution from development which is not serviced by appropriate waste water infrastructure.





**Figure 3.10 Soil Type**





**Figure 3.11 Geology**



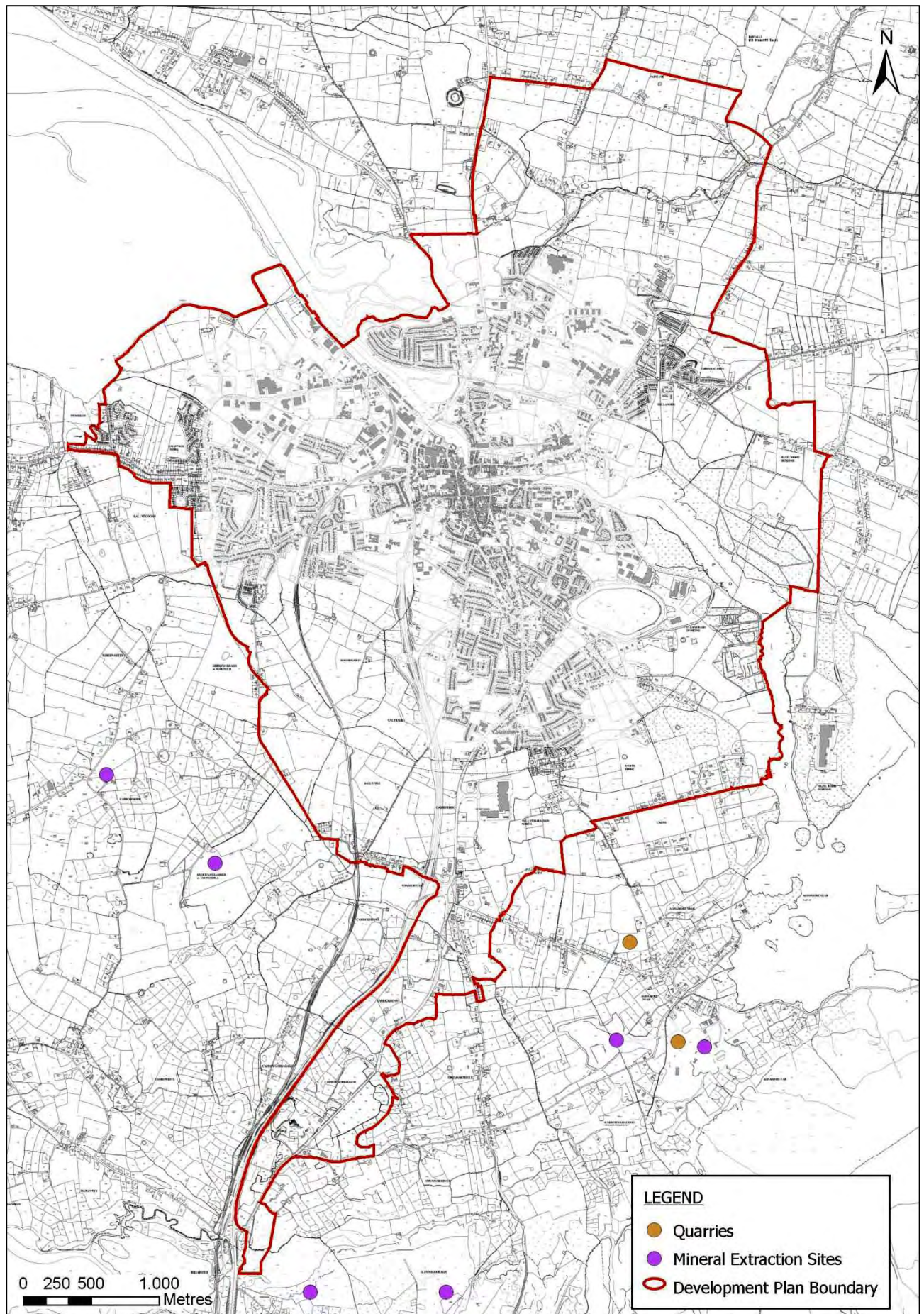


Figure 3.12 Quarries and Mineral Extraction Sites

## 3.5 Water

### 3.5.1 Introduction

Water within and surrounding Sligo has many functions: it provides drinking water to the area's population; it sustains the biodiversity and flora and fauna described under Section 3.2; and it is an integral part of the landscape both within the Town and across the wider surrounding Sligo area.

### 3.5.2 Potential Pressures on Water Quality

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

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

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

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

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

*Structural alterations* such as river straightening; construction of embankments, weirs, dams, port facilities and dredging can create conditions

such that a water body is no longer able to support the natural ecology which would have existed prior to such modifications. These pressures are also referred to as *morphological pressures*.

### 3.5.3 The Water Framework Directive

#### 3.5.3.1 Introduction and Requirements

Since 2000, Water Management in the EU has been directed by the Water Framework Directive 2000/60/EC (WFD). The WFD requires that all Member States implement the necessary measures to prevent deterioration of the status of all waters - surface, ground, estuarine and coastal - and protect, enhance and restore all waters with the aim of achieving good status by 2015. All public bodies, including Sligo Borough Council and Sligo County Council, are also required to: coordinate their policies and operations so as to maintain the good status of water bodies which are currently unpolluted; and improve polluted water bodies to good status by 2015.

#### 3.5.3.2 River Basin Districts and Water Bodies

For the purpose of implementing the WFD, Ireland has been divided into eight river basin districts or areas of land that are drained by a large river or number of rivers and the adjacent estuarine / coastal areas. The management of water resources will be on these river basin districts. The Sligo and Environs area is located in the Western River Basin District (WRBD).

Within each river basin district - for the purpose of assessment, reporting and management - water has been divided into groundwater, rivers, lakes, estuarine waters and coastal waters which are in turn divided into specific, clearly defined *water bodies*.

#### 3.5.3.3 WFD Risk Assessments

In order to achieve the objectives of the WFD it is necessary:

- to assess the risk that water bodies may not achieve good quality status;
- to identify the pressures from human activities causing this risk; and,



- to develop strategies and management plans to minimise the risk.

Risk assessment procedures were developed at national level and applied across all River Basin Districts in order to analyse the impact of the pressures referred to under Section 3.5.2. The risk assessments were predictive, i.e. they examined each pressure and predicted the magnitude which would be likely to have a negative impact.

Each water body has been assessed, on the basis of human activity, whether it is *at risk* or *not at risk* of failing to achieve the WFD's objectives by 2015. The classifications used for reporting this assessment are:

- *(1a) At Significant Risk* - water body is at risk of failing to meet good status in 2015;
- *(1b) Possibly at Significant Risk* - water body is thought to be at risk of failing to meet good status in 2015 pending further investigation;
- *(2a) Probably Not at Significant Risk* - the water body is expected to meet good status in 2015; and,
- *(2b) Not at Significant Risk* - water body is expected to meet good status in 2015, pending further investigation.

Water bodies placed in the *(1a) At Significant Risk* category will need improvement to achieve the required status while water bodies in the *(1b) Possibly at Significant Risk* category are likely to need improvement in order to achieve the required status.

#### 3.5.3.4 WFD Registers of Protected Areas

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

The WFD requires that these RPAs contain: areas from which waters are taken for public or private water supply schemes; designated shellfish production areas; bathing waters; areas which are affected by high levels of substances most commonly found in fertilizers, animal and human wastes - these areas are considered nutrient sensitive; areas designated for the

protection of habitats or species e.g. salmonid areas; Special Areas of Conservation (SACs); and, Special Protection Areas (SPAs).

#### 3.5.3.5 River Basin Management Plan

Local Authorities located in the WRBD, including Sligo Borough Council and Sligo County Council, have prepared a draft management plan which will be implemented in order to help protect and improve all waters in the WRBD. This Management Plan will provide specific policies for individual river basins in order to implement the requirements of the WFD. The first River Basin Management Plan for the Western RBD was published at the end of 2008 for public consultation.

### 3.5.4 Rivers

#### 3.5.4.1 Introduction

The Garavogue River runs east to west through the heart of Sligo Town from Lough Gill into Sligo Harbour and subsequently, into Sligo Bay. The Willsborough Stream rises to the north east of the Plan area and flows through the northern Plan area before entering the sea at Sligo Harbour.

#### 3.5.4.2 Water Quality

Figure 3.13<sup>23</sup> indicates the water quality of rivers at two locations within the Plan area, one on the Garavogue River and the other on Willsborough Stream. The status of water quality is higher on the Garavogue River, which achieves "High Status Q4-5" as opposed to the status of Willsborough Stream which reaches "Moderate Status Q3-4".

#### 3.5.4.3 WFD Risk Assessment of Rivers

Figure 3.14<sup>24</sup> shows the current risk assessments for rivers in and surrounding the Plan area. In terms of achieving the WFD's objectives by 2015 the Willsborough Stream is currently classified as being *(1b) possibly at significant risk of not achieving good status* by 2015.

It is noted that the Garavogue River appears unclassified on Figure 3.14. The current

<sup>23</sup> EPA (2004) *Interim Report on the Biological Report on the Biological Survey of River Quality Results of the 2003 Investigations* Wexford: EPA

<sup>24</sup> Western River Basin District (2005) *Article 5 Characterisation: Summary Report* Galway: Western River Basin District

classification of the Garavogue River is (1b) *possibly at significant risk of not achieving good status* by 2015.<sup>25</sup>

### 3.5.5 Lakes

#### 3.5.5.1 Introduction

Lough Gill lies outside the Development Limit, 3km south east of the Town. It is approximately 8km in length with a maximum width of 3.5km. The lake surface area is 14km<sup>2</sup>. Lough Gill supplies water to the Plan area, see section 3.7.2.

#### 3.5.5.2 Water Quality

Figure 3.15<sup>26</sup> maps the water quality of lakes for the Plan area. Lough Gill is classified as being oligotrophic/mesotrophic. Mesotrophic lakes are lakes with an intermediate level of productivity, greater than oligotrophic lakes, but less than eutrophic lakes. Eutrophication has long been the principal pressure on lake water quality in Ireland. It is caused by enrichment of water by nutrients (especially phosphorous and/or nitrogen compounds) causing an accelerated growth in algae and other plant forms, which causes an undesirable disturbance to the balance of organisms present in the water, and the quality of the water. Mesotrophic lakes are commonly clear water lakes and ponds with beds of submerged aquatic plants and medium levels of nutrients.

#### 3.5.5.3 WFD Risk Assessment of Lakes

Figure 3.16<sup>27</sup> shows the WFD risk assessment of lakes for the Plan area. Lough Gill is classified as *1a at significant risk of not achieving good status* by 2015. This is likely to be due to morphological pressures such as intensive landuse.

<sup>25</sup> This was established after consultation with the EPA before the publication of the Draft Plan and Environmental Report

<sup>26</sup> EPA (2008) *State of lake water quality in Ireland including trends, legislation and actions required* Wexford: EPA.

<sup>27</sup> Western River Basin District (2005) *Article 5 Characterisation: Summary Report* Galway: Western River Basin District

### 3.5.6 Estuarine Waters

#### 3.5.6.1 Introduction

Estuarine and transitional waters are bodies of surface water in the vicinity of river mouths which are partly saline in character as a result of their proximity to coastal waters but which are substantially influenced by freshwater flows.

The waters of Sligo Harbour support a variety of birdlife which sustain a flow of nutrients into these waters.

#### 3.5.6.2 EPA Monitoring

The Assessment of Trophic Status of Estuaries and Bays in Ireland (ATSEBI) System is used by the EPA in order to classify the quality status of transitional waters. Categories of criteria for nutrient enrichment, accelerated growth, and undesirable disturbance are used by the ATSEBI in order to classify the estuarine and coastal waters.

#### 3.5.6.3 Water Quality

Figure 3.17<sup>28</sup> shows the quality of the estuarine waters for the Plan area. Sligo Harbour/Garavogue Estuary has been classified as "Intermediate". Ballysadare Bay and Sligo Bay are classified as being "Unpolluted". Intermediate waterbodies are those which do not fall into the Eutrophic or Potentially Eutrophic classes but in which breaches one or two of the criteria occur; Unpolluted waterbodies are those which do not breach any of the criteria.

#### 3.5.6.4 WFD Risk Assessment of Estuarine Waters

Figure 3.18<sup>29</sup> shows the current risk assessment for the estuarine waters of the Sligo and Environs area.

In terms of achieving the WFD's objectives by 2015, waters at Sligo Harbour/Garavogue Estuary are currently classified as being *(1a) at significant risk of not achieving good status* by 2015. Waters at Ballysadare Estuary are classified as being *(1b) possibly at significant risk of not achieving good status* by 2015.

<sup>28</sup> EPA (2008) *Water Quality in Ireland 2004 – 2006* Wexford: EPA

<sup>29</sup> Western River Basin District (2005) *Article 5 Characterisation: Summary Report* Galway: Western River Basin District

Morphological pressures such as built structures-port tonnage and urban or industrial shorelines are the reason behind the classification for Sligo Harbour. Point source pollution such as waste water treatment plants, water treatment plants and other pressures also contribute towards its classification.

### 3.5.7 Coastal Waters

#### 3.5.7.1 Introduction

Coastal waters are important for tourism, for use as bathing locations and for supporting marine wildlife.

#### 3.5.7.2 WFD Risk Assessment of Coastal Waters

Figure 3.19<sup>30</sup> shows the WFD risk assessment for the coastal waters located off Sligo. These waters are classified as being *(1a) at significant risk of not achieving good status* by 2015. Morphological pressures such as built structures - port tonnage and an urban or industrial shoreline had lead to this classification.

### 3.5.8 Groundwater

#### 3.5.8.1 Introduction

Groundwater is stored in the void spaces in underground layers of rock, or aquifers. These aquifers are permeable, allowing both the infiltration of water from the soils above them and the yielding of water to surface and coastal waters. Groundwater is the part of the subsurface water that is in the saturated zone - the zone below the water table, the uppermost level of saturation in an aquifer at which the pressure is atmospheric, in which all pores and fissures are full of water.

#### 3.5.8.2 Groundwater Vulnerability

Aquifer vulnerability refers to the ease with which pollutants of various kinds can enter underground water. Extreme aquifer vulnerability which can be found underlying land to the south and south east of the plan area is the classification of aquifers which is most sensitive to an imposed contaminant load. The Geological Survey of Ireland (GSI) rates aquifers according to their vulnerability to pollution.

Figure 3.20<sup>31</sup> maps these ratings for the Plan area. High to low aquifer vulnerability which is the most common vulnerability to be found throughout the Plan area, though only an interim study took place.

#### 3.5.8.3 Groundwater Productivity

The (GSI) rates aquifers based on the hydrogeological characteristics and on the value of the groundwater resource. The Republic of Ireland's entire land surface is divided into nine aquifer categories. Two of these classifications apply to the groundwater underlying the Plan area. The majority of the Plan area is underlain by a regionally important aquifer and the remainder of the Plan area being underlain by a locally important aquifer as seen in Figure 3.21<sup>32</sup>.

#### 3.5.8.4 WFD Risk Assessment of Groundwater

Figure 3.22<sup>33</sup> maps the current risk assessment for groundwater in the Sligo and Environs area. The groundwater bodies underlying the majority of the Sligo and Environs Plan area are currently classified as being *(1b) possibly at significant risk* of failing to achieve the WFD's objectives by 2015 while groundwater bodies underlying the north and west of the Plan Area are classified as *(2a) probably not at significant risk*.

Point source pollution from mining and quarries and mobile chemicals are the factors which contribute to the classifications.

Urban groundwater pollution sources and pathways are complex, and sources of pollution are difficult to control. Because of the complexities involved, urban groundwater pollution is considered to be a significant water management issue on a national scale as: Irish towns have grown rapidly; and, the financial costs of returning affected groundwater bodies to WFD status objectives will likely be significant, requiring extensive monitoring and management measures.

<sup>30</sup> Western River Basin District (2005) *Article 5 Characterisation: Summary Report* Galway: Western River Basin District

<sup>31</sup> Dataset provided by Sligo County Council (unknown) *Groundwater Vulnerability* Sligo: Sligo County Council

<sup>32</sup> Geological Survey of Ireland (2006) *Groundwater Aquifers* Dublin: Government of Ireland

<sup>33</sup> Western River Basin District (2005) *Article 5 Characterisation: Summary Report* Galway: Western River Basin District

The EPA is currently undertaking an urban pressure assessment on groundwater. When completed, this assessment will be used by the EPA to define a national network of monitoring wells in urban areas that will provide additional information on groundwater within urban areas.

### 3.5.9 Register of Protected Areas

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

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

A number of water bodies within and surrounding Sligo have been listed on the WFD Register of Protected Areas (RPAs) and are as follows (see Figure 3.23 and Figure 3.24)<sup>34</sup>:

- Sligo Bay has been listed on the RPA for *Species SPA* and *Recreational Waters*;
- The Garavogue River is listed on the RPA for *Drinking Water Rivers*; and,
- Groundwater underlying and surrounding the Plan Area is listed on the RPA for *Drinking Water GW*.

### 3.5.10 Existing Problems

The above descriptions identify a number of sensitivities with regard to the status of water bodies within the Sligo and Environs Plan area. By virtue of how they are used by people and by wildlife, Sligo Harbour, the Garavogue River and the groundwater underlying the area are listed

on the Registers of Protected Areas under the Water Framework Directive.

Sligo Harbour, the Garavogue Estuary and Lough Gill are *at significant risk of failing* to achieve the WFD's objectives of good status by 2015.

### 3.5.11 Evolution of Water in the absence of a Development Plan

Based on the current risk assessment, Sligo Harbour, the Garavogue Estuary and Lough Gill are likely to fail to meet their commitments under the WFD.

If new development was not accompanied by appropriate waste water infrastructure /capacity then it is likely that:

- Sligo Harbour, the Garavogue Estuary and Lough Gill would fail to meet WFD commitments;
- significant adverse impacts upon the biodiversity and flora and fauna of Sligo and Environs area would be likely to arise; and,
- significant adverse effects upon the Area's drinking water supplies and human health as a result of poor water quality would be likely to occur.

<sup>34</sup> EPA (2008) *Register of Protected Areas GIS dataset*  
Wexford: EPA



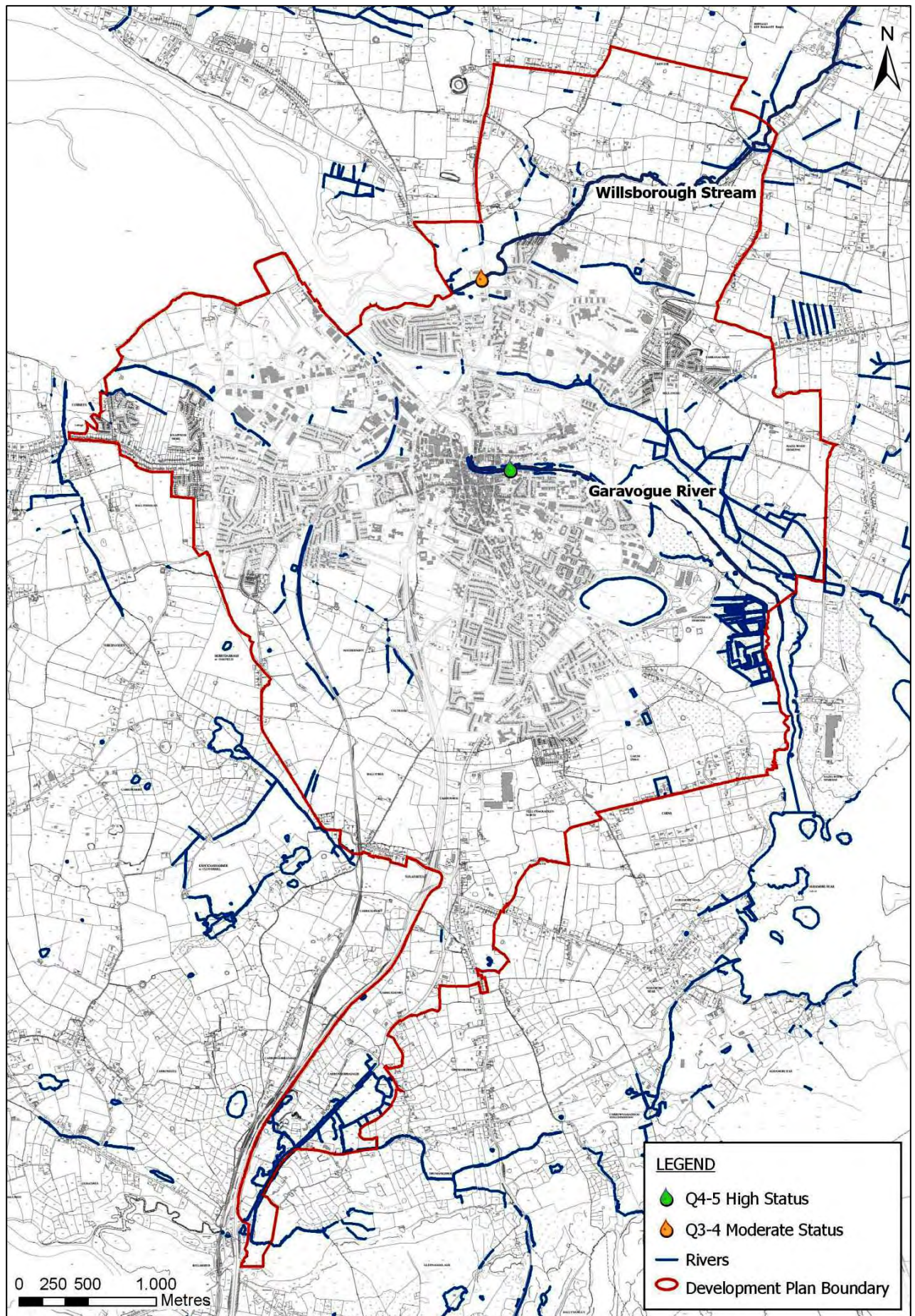


Figure 3.13 Q Values of Rivers



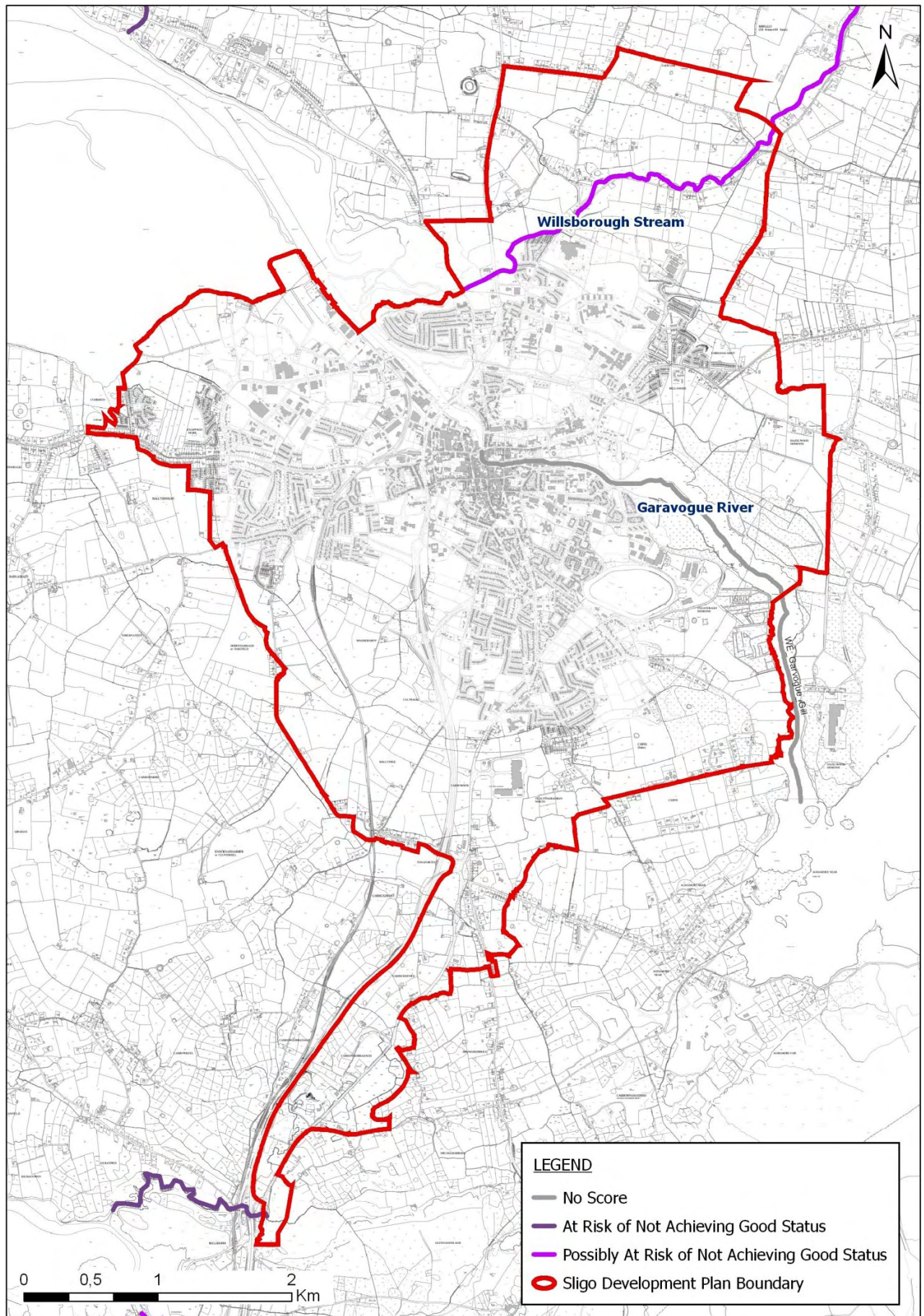


Figure 3.14 WFD Risk Assessment of Rivers



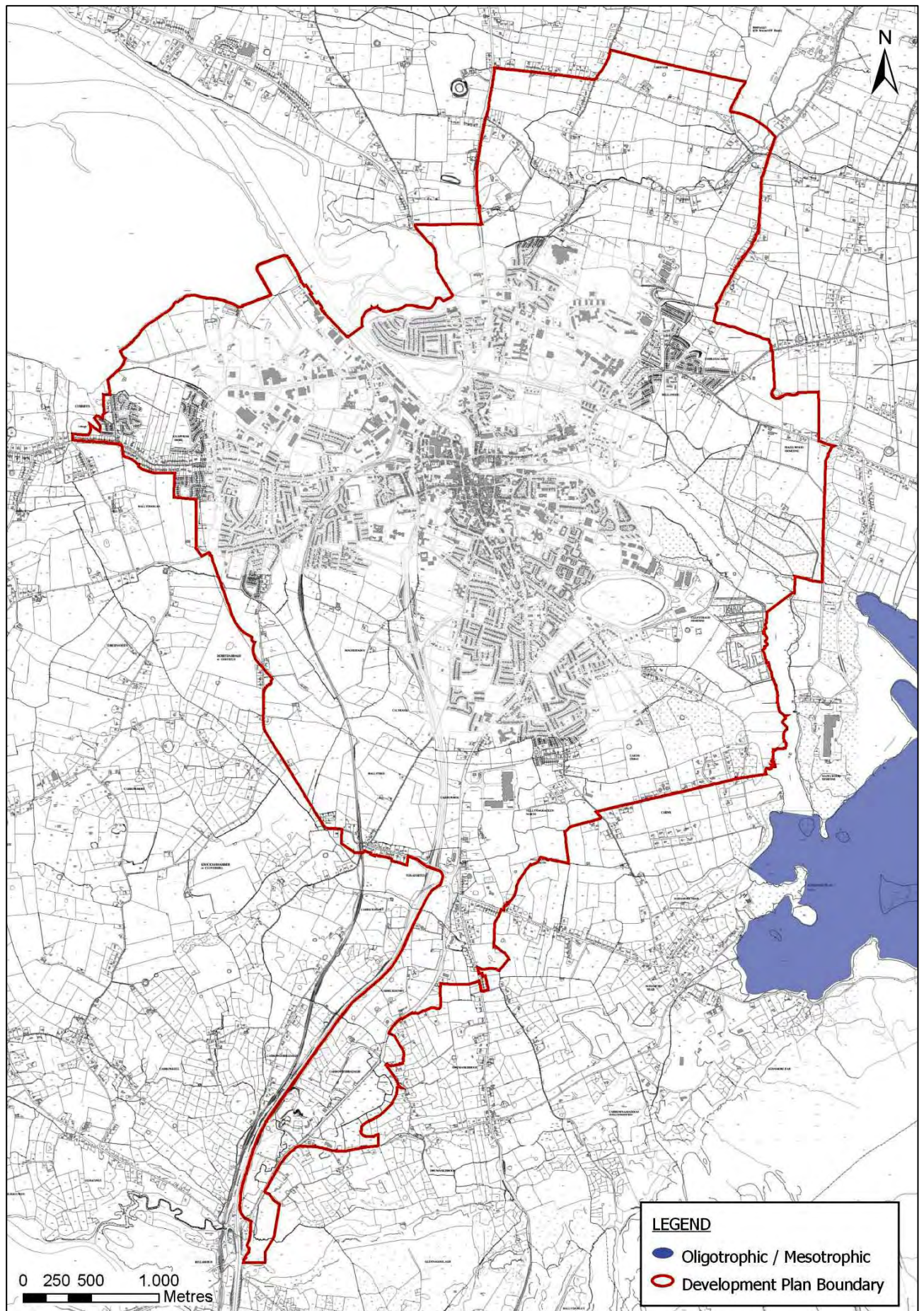


Figure 3.15 Water Quality of Lakes



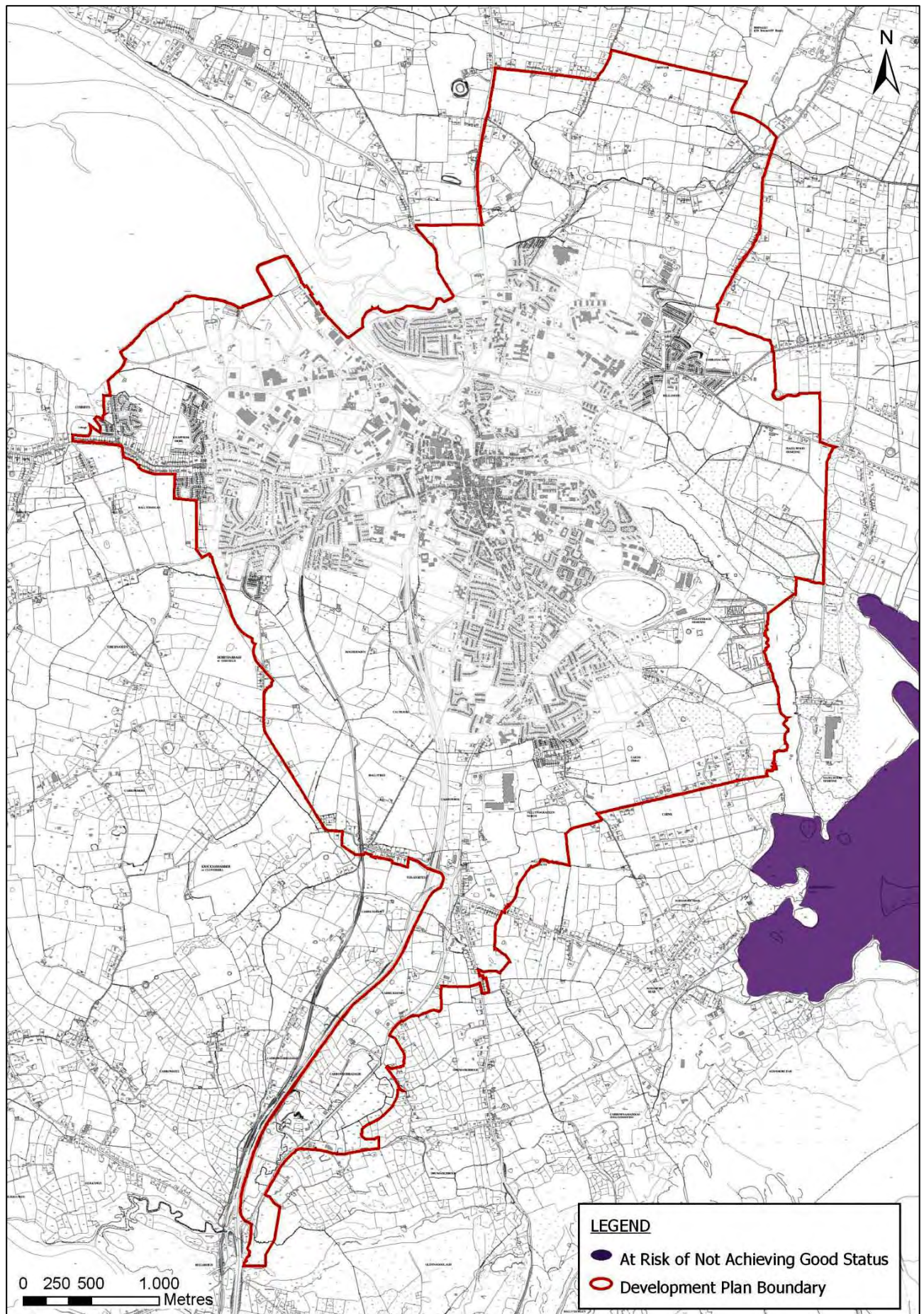


Figure 3.16 WFD Risk Assessment of Lakes



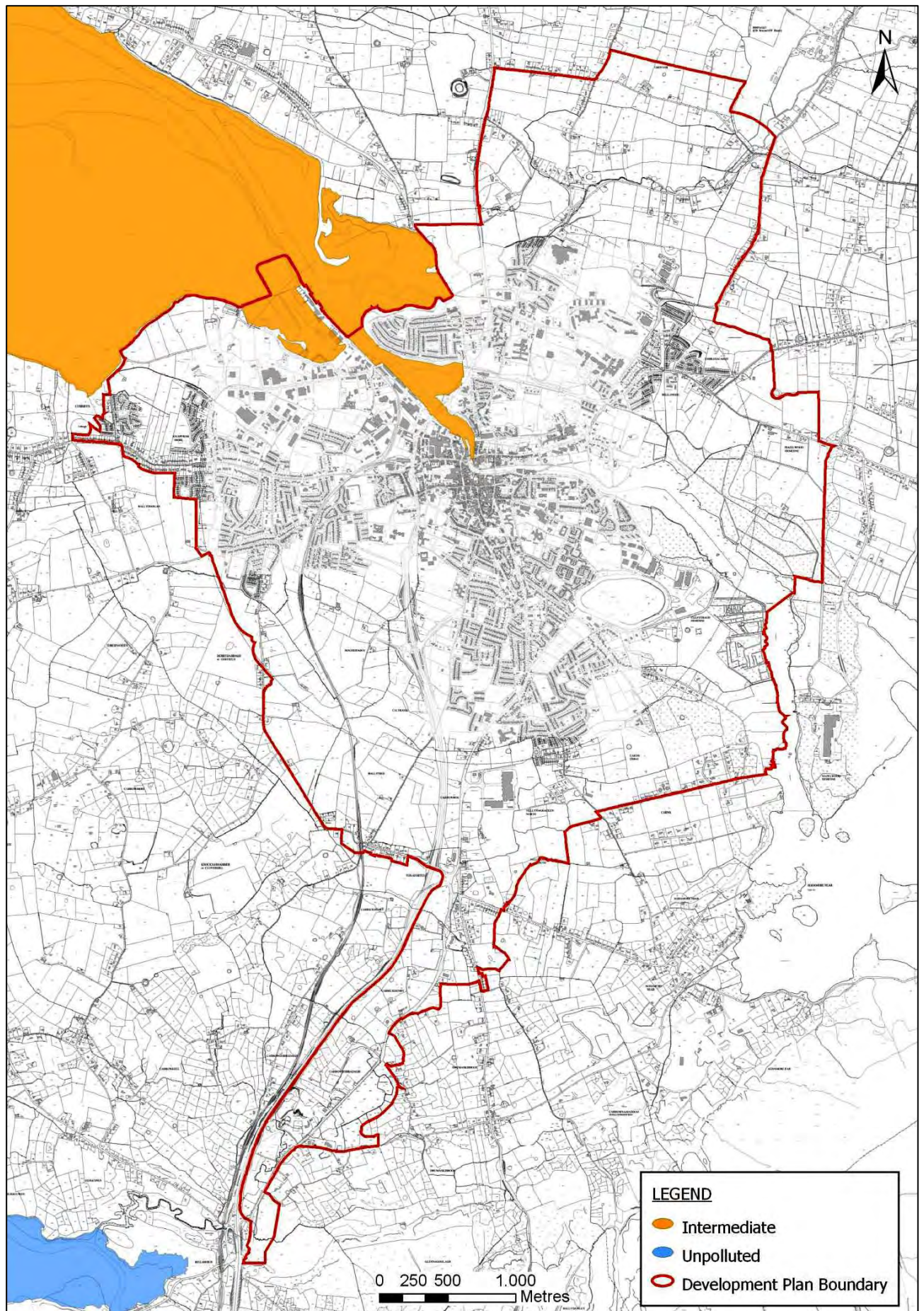


Figure 3.17 Quality of Estuarine Waters



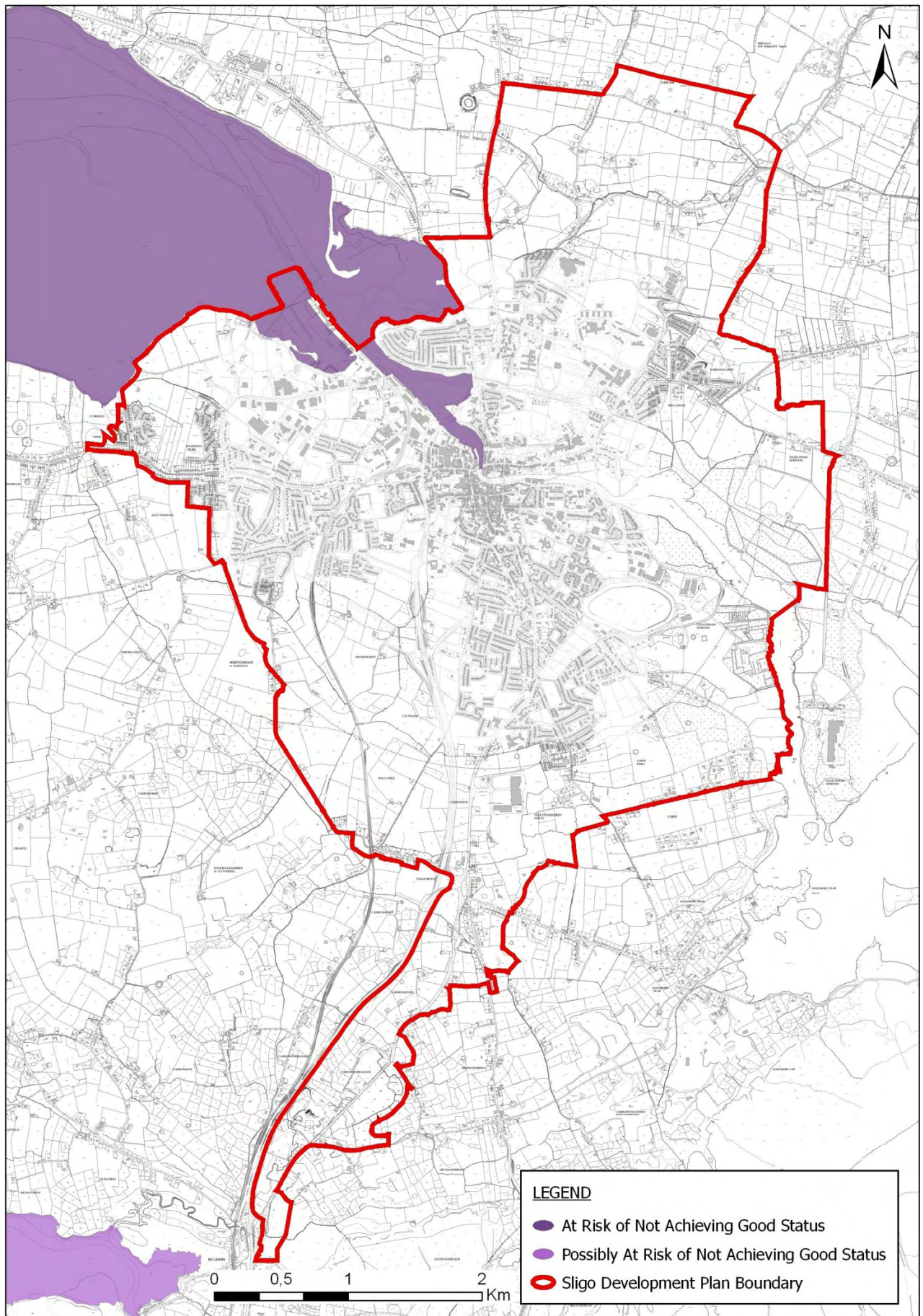


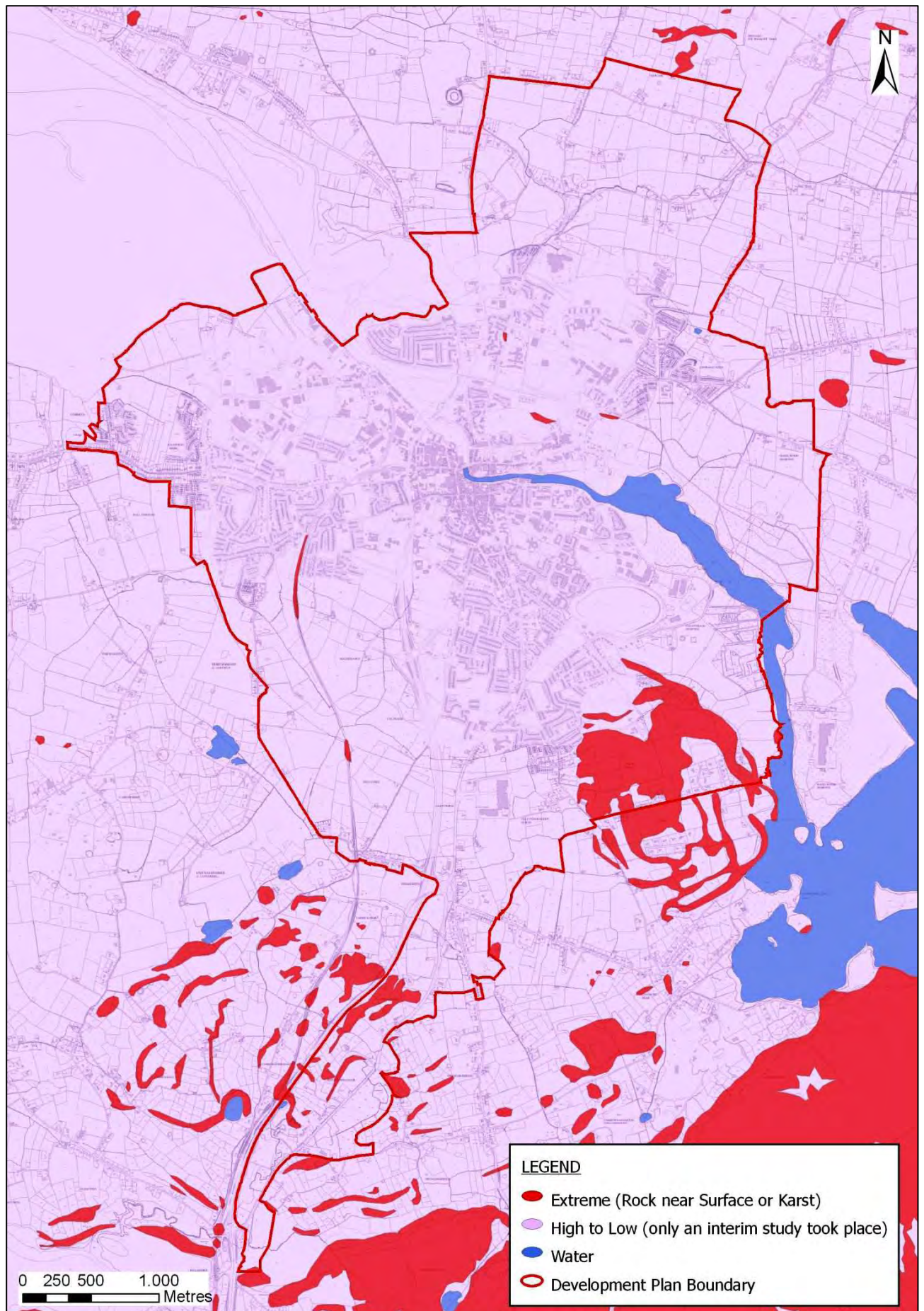
Figure 3.18 WFD Risk Assessment of Estuarine Waters





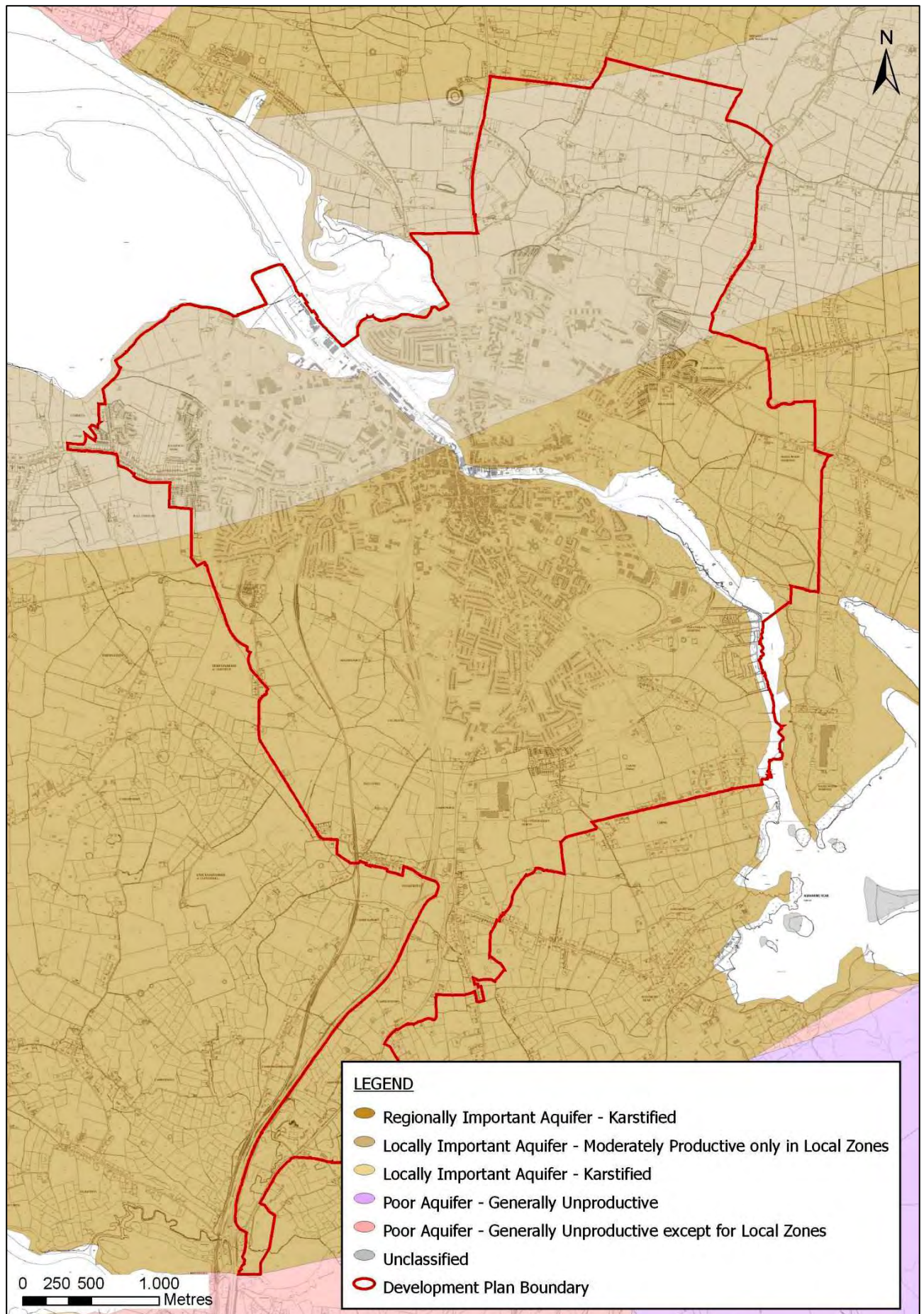
Figure 3.19 WFD Risk Assessment of Coastal Waters





**Figure 3.20 Aquifer Vulnerability**





**Figure 3.21 Aquifer Productivity**



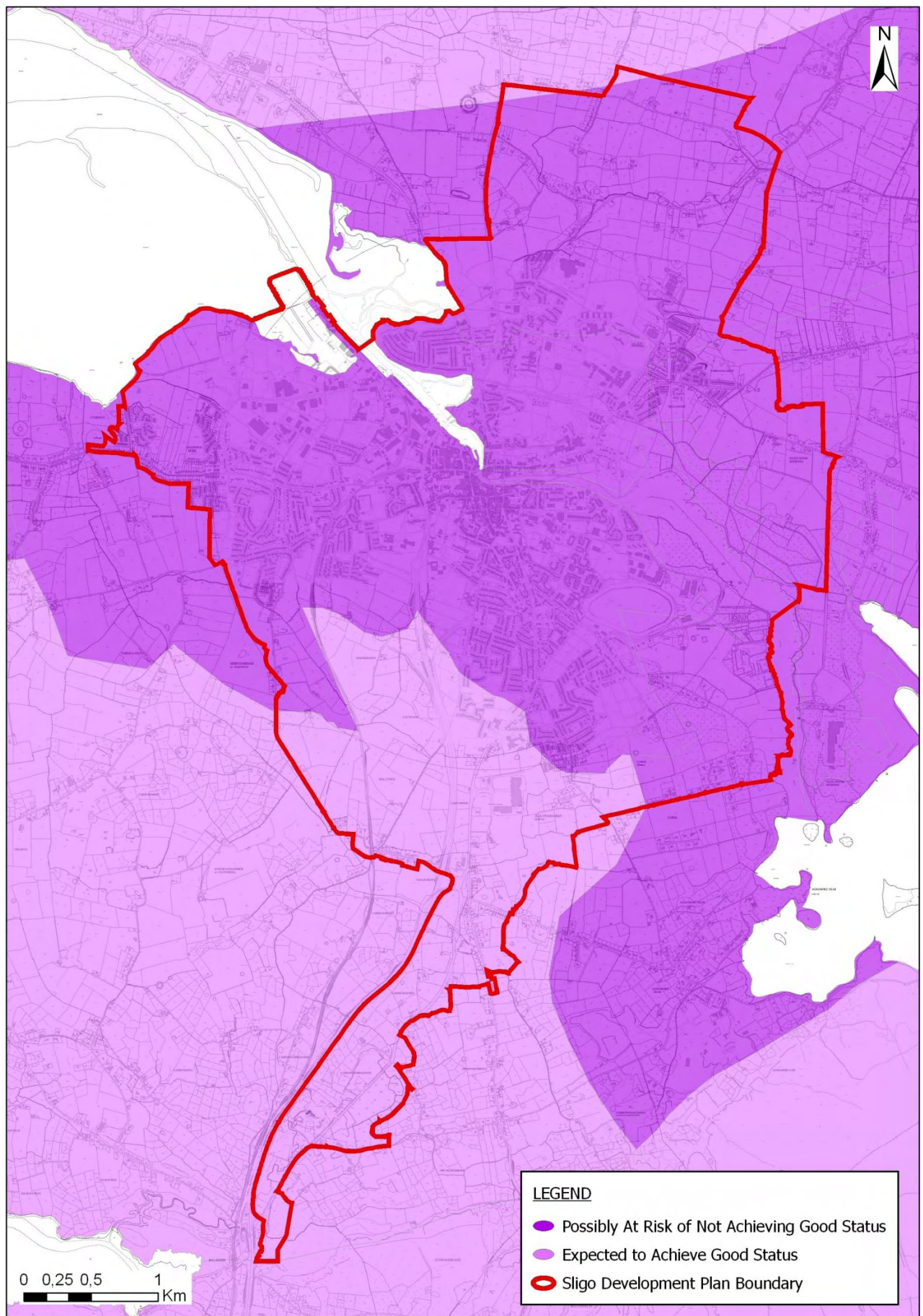
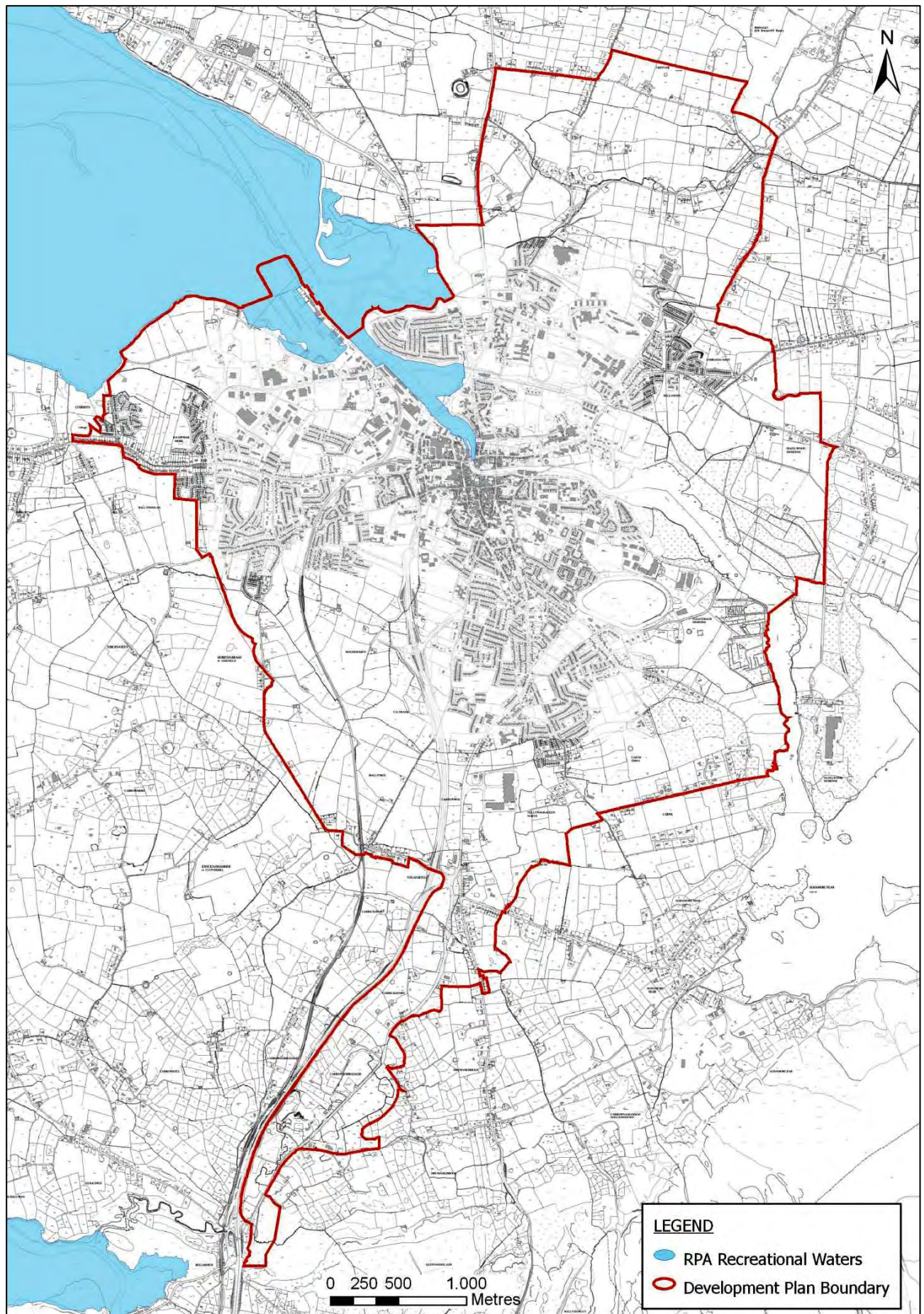


Figure 3.22 WFD Risk Assessment of Groundwater





**Figure 3.23 WFD Protected Areas – Recreational Waters**



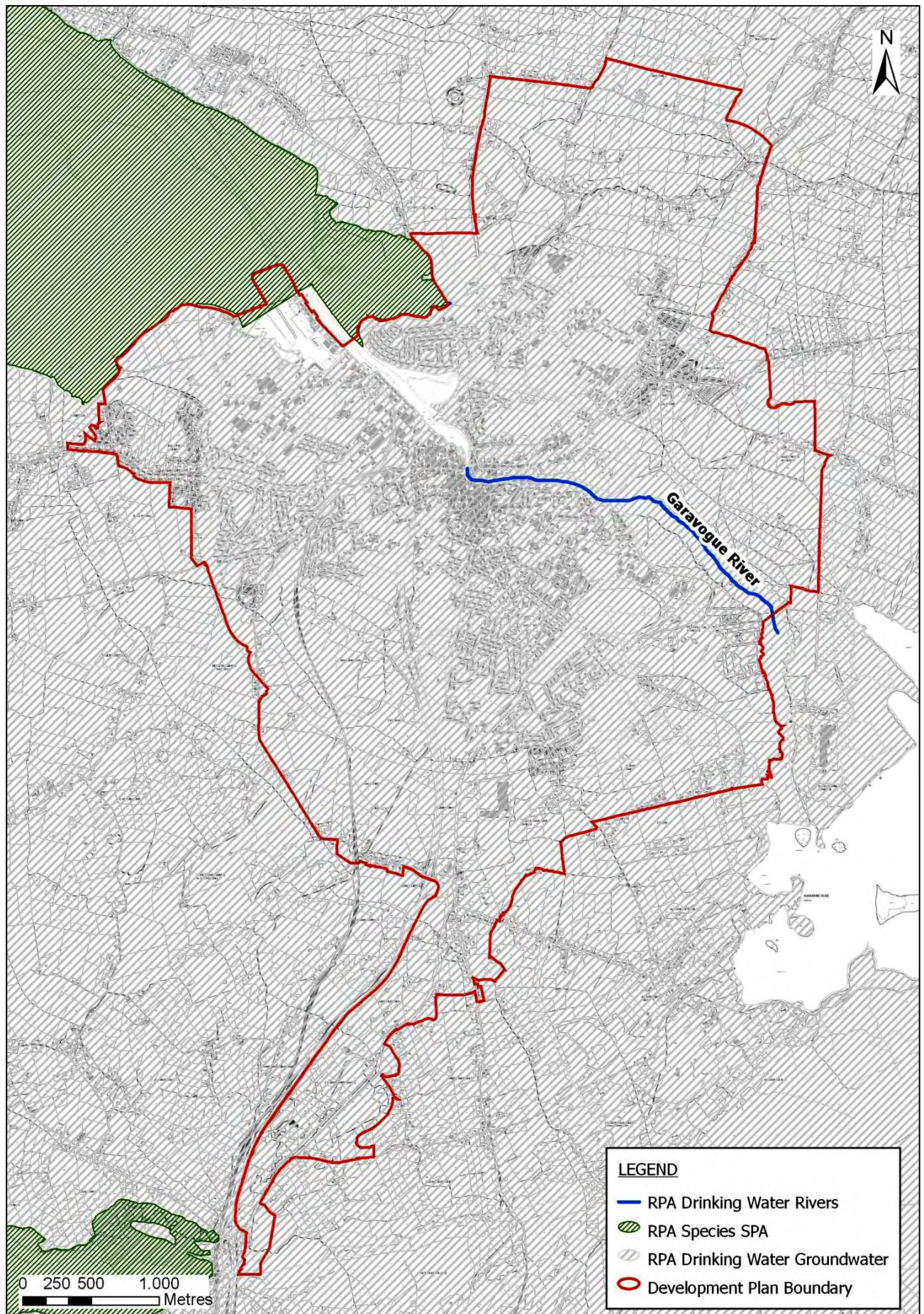


Figure 3.24 WFD Protected Areas



## 3.6 Air and Climatic Factors

### 3.6.1 Ambient Air Quality

#### 3.6.1.1 Introduction and Legislation

In order to protect human health, vegetation and ecosystems, EU Directives set down air quality standards in Ireland and the other member states for a wide variety of pollutants. These pollutants are generated through fuel combustion, in space heating, traffic, electricity generation and industry and, in sufficient amounts, could affect the well being of the Towns inhabitants. The EU Directives, outlined below, include details regarding how ambient air quality should be monitored, assessed and managed.

The principles to this European approach are set out under the Air Quality Framework Directive 1996 as transposed into Irish law under the Environmental Protection Agency Act 1992 (Ambient Air Quality Assessment and Management) Regulations 1999 (SI No. 33 of 1999).

Four daughter Directives lay down limits or thresholds for specific pollutants. The first two of these directives cover: sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter and lead; and carbon monoxide and benzene. Two more daughter directives deal with: ozone; and polyaromatic hydrocarbons, arsenic, nickel, cadmium and mercury in ambient air.

In order to comply with these directives, 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 2002 (SI No. 271 of 2002). The main areas defined in each zone are:

- Zone A: Dublin Conurbation.
- Zone B: Cork Conurbation.
- Zone C: Other cities and large towns comprising Galway, Limerick, Waterford, Clonmel, Kilkenny, Sligo, Drogheda, Wexford, Athlone, Ennis, Bray, Naas, Carlow, Tralee and Dundalk.

- 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.

Current air quality in Zone C is "good". The index is calculated based on the latest available measurements of PM10, sulphur dioxide, nitrogen dioxide and ozone in Zone C.

#### • Particulate matter (PM10 and PM2.5)

Particulate matter (PM10 and PM2.5), or dust, arises from vehicle exhaust emissions, soil and road surfaces, construction works and industrial emissions. Small particles can penetrate the lungs and cause damage. These are known as PM10 (diameter less than 10µm) and PM2.5 (diameter less than 2.5µm). There are high levels of PM10 in many towns and cities.

#### • Sulphur dioxide (SO2)

In Ireland, the main source of sulphur dioxide (SO2) is burning coal and oil to heat homes and industries and to produce electricity. It is an irritant gas which attacks the throat and lungs. It contributes to the formation of acid rain which damages vegetation and buildings. Levels of SO2 have decreased over recent years due to increased use of low-sulphur coal, increased use of natural gas instead of solid fuels and reduced industrial emissions through IPPC licensing.

#### • Nitrogen oxides (NOx)

The main source of nitrogen oxides (NOx), including nitrogen dioxide (NO2), is traffic along with electricity generating stations, industry and space heating, which is mostly used in winter. When fuel is burnt in air, a small fraction of nitrogen in the air is converted to nitric oxide. Nitric oxide slowly converts to NO2 and particularly in the presence of ozone.

NO2 can adversely affect the throat and lung causing emphysema and cellular damage. Nitrogen oxides are aesthetically unpleasant as they have a brown colour and gives rise to a brown haze. Levels in Ireland have seen an due to growth in traffic numbers.

Increases in the use of catalytic converters, cleaner fuels, better engine technology and maintenance is reducing the amount of NO2 omitted per motor vehicle however this

reduction is probably being offset by the increase in the number of cars as well as the increase in the volume and incidences of traffic congestion.

- **Ozone (O<sub>3</sub>)**

Ozone is a natural component of the atmosphere. Most ozone is found high up in the stratosphere, the layer of the atmosphere between 12km and 50km above sea level. Stratospheric ozone is essential to life on earth as it protects us from harmful rays from the sun.

Ozone is also found in the troposphere, the layer of the atmosphere next to the earth. Exposure to high concentrations of tropospheric ozone causes chest pains, nausea and coughing in humans.

Long term exposure to moderate concentrations causes a reduction in lung capacity and can worsen heart disease, bronchitis, emphysema and asthma. Tropospheric ozone contributes to the greenhouse effect and subsequent global climate change. Levels of ozone in Ireland are moderate.

### 3.6.1.2 Air Quality Monitoring

Air Quality Monitoring was carried out from 21/01/2003 to 02/10/2003 at the car park in front of the Regional Hospital overlooking Sligo Town. Monitoring was done by a mobile unit containing continuous monitors for sulphur dioxide, nitrogen oxides, carbon monoxide and benzene. Continuous samples were also taken for particulates (PM10) and lead.

The nearest monitoring station to Sligo is in Castlebar. PM10 is measured at this site by the EPA. The PM10 limit of 50 ug m<sup>-3</sup> is deemed breached if more than 35 exceedances have occurred. In Castlebar, there have been 9 exceedances in the first six months of 2008, up from 8 for the year 2007.

## 3.6.2 Potential Point Sources of Emissions

### 3.6.2.1 IPPC Licensed Facilities

The EPA has been licensing certain large-scale industrial and agriculture activities since 1994. Originally the licensing system was known as Integrated Pollution Control (IPC) licensing, governed by the Environmental Protection Agency Act, 1992. The Act was amended in

2003 by the Protection of the Environment Act, 2003 which gave effect to the Integrated Pollution Prevention Control (IPPC) Directive. Detailed procedures concerning the IPPC licensing process are set out in the EPA Acts 1992 to 2007 and the associated licensing regulations.

IPPC licences aim to prevent or reduce emissions to air, water and land, reduce waste and use energy/resources efficiently. An IPPC license is a single integrated license which covers all emissions from a 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 four IPPC licensed facilities within the Sligo and Environs Plan area, and one just outside the boundary. The locations of these facilities are mapped on Figure 3.25<sup>35</sup>.

Company names and the principle class of activities are listed below:

- Cold Chon (Galway) Ltd. Sligo Depot: The chemical manufacture of glues, bonding agents and adhesives.
- Fort Dodge Laboratories Ireland Ltd. The manufacture of pesticides, pharmaceutical or veterinary products and their intermediates.
- Supershrone Limited: The treatment or protection of wood involving the use of preservatives with a capacity exceeding 10 tonnes per day.
- Abbott Ireland Pharmaceutical Operations: The use of a chemical or biological process for the production of basic pharmaceutical products.

There is one active waste licenses in the Plan area for a Greenstar waste transfer station at Deepwater Quay.

<sup>35</sup> Dataset provided by Sligo County Council (unknown) *IPPC GIS dataset* Sligo: Sligo County Council



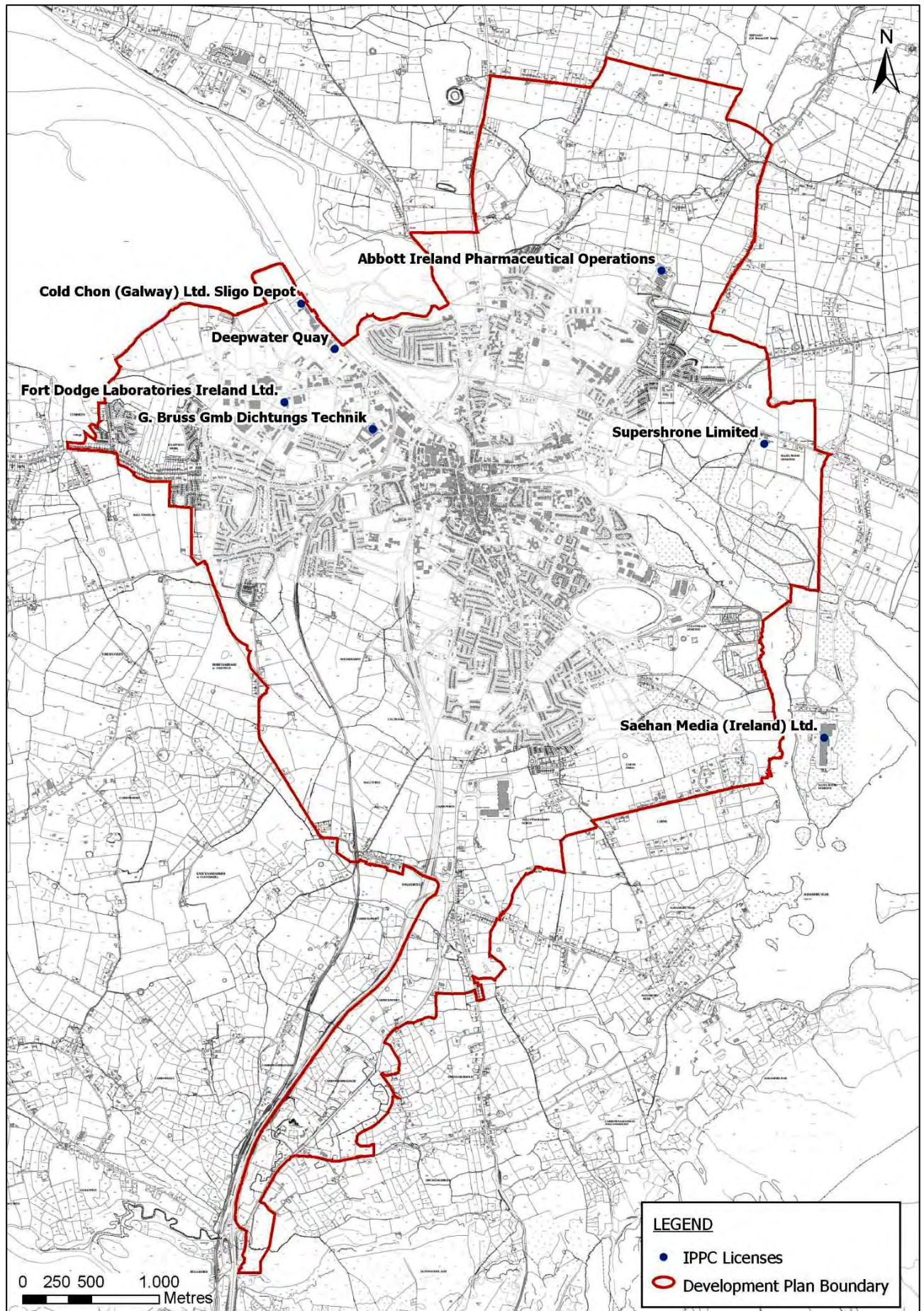


Figure 3.25 IPPC Licensed Facilities

### 3.6.3 Noise

The over-riding noise source in Sligo and Environs is from traffic. Streets in low lying areas that have high traffic counts as well as enclosing taller buildings are likely to have harsh sensory environments with regard to noise levels.

In addition, there are localised noise sources which include air conditioning equipment, train movements and night clubs.

### 3.6.4 Climatic Factors

#### 3.6.4.1 Greenhouse Gases

In order to reduce greenhouse gas emissions the internationally agreed Kyoto Protocol established emissions reduction targets for developing countries. Ireland's emission target for greenhouse gases is to limit the increase in their combined emissions during the five-year period 2008-2012 to 13 per cent above 1990 levels.

In 2006, transport was the dominant growth sector with emissions at 682,000 tonnes higher in 2006 than in 2005. This represents a 5.2% increase on 2005 levels and 165% increase on the 1990 transport emissions. Road transport accounts for 97% of the transport sector emissions. The increase in the GHG emissions from the transport sector reflects sustained increases in fuel consumption with petrol usage up 3.4% and diesel consumption up 7.9% from the previous year.

#### 3.6.4.2 Climate Change

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. This greenhouse effect occurs in the atmosphere and is caused by greenhouse gases which exist naturally in the atmosphere. The greenhouse gases retain the radiation which is released from the earth as a result of heating by the sun. This retention maintains a global temperature which is suitable for ecosystems and life.

Climate change is not limited to changes in temperatures or weather - it can also mean changes in the occurrence of extreme and unstable weather conditions, storms and floods, droughts and coastal erosion.

#### 3.6.4.3 Flooding

The EPA's 'Climate Change: Scenarios and Impacts for Ireland' (2003) report identifies where vulnerability to climate change exists in Ireland and what adjustments are likely in the operation of environmental systems in response to such changes.

Details of the most significant recent flooding events in the Plan area - accessible from the OPW's National Flood Hazard Mapping website - are identified on Table 3.2 below. Within the Plan boundary there are six areas which are recorded as having flood events. All flood events are recurring and are mapped on Figure 3.26<sup>36</sup>.

Flood event	Area affected	Description
Recurring	Finisklin Road	Road flooding at Finisklin road during extreme high tides and heavy rain.
Recurring	Lower Quay Street	Car park flooding in vicinity of Lower Quay Street, Sligo City during periods of extreme spring tides combined with high winds.
Recurring	Fish Street	Road flooding at Fish Street, Sligo City, during extreme spring tides and high onshore winds.
Recurring	Near Sligo Hospital	Road flooding during periods of heavy rain due to low point in the road combined with lack of capacity in surface water network.
Recurring	Sligo Institute of Technology	Land flooding during high tides combined with debris build backing up occurs and causes land to flood.
Recurring	Sligo Institute of Technology	Historical flooding of college due to blockage in discharge to the sea.

**Table 3.2 Flood Events within the Plan area**

<sup>36</sup> OPW (2005) *Flood Events and Extents GIS dataset*  
Dublin: OPW



In September 2008, the DEHLG published, for public consultation, new draft Planning Guidelines on the Planning System and Flood Risk Management which are aimed at ensuring a more consistent, rigorous and systematic approach to fully incorporate flood risk assessment and management into the planning system.

Local authorities are requested to have regard to the recommended flood risk identification, assessment and management process, when preparing or varying development plans and local area plans, and in regard to applications for planning permission, pending finalisation of the Guidelines. Regard to these Guidelines has been had when drawing up the mitigation measures included in Section 9.

### 3.6.5 Existing Problems

Monitored air quality in Zone C meets current standards - despite the occurrence of traffic congestion and recent development. It is noted however that *traffic hotspots* within Sligo are likely to have elevated levels of air pollution and noise due to traffic congestion. Traffic hotspots are located along the main road routes - especially at intersections - and provide for a harsh sensory environment which may impact upon human health. Traffic hotspots in low lying areas that have retaining high buildings are likely to provide for harsher sensory environments with regard to air pollution and noise levels. The proposed ring road at Sligo is likely to alleviate much of this congestion in the Town Centre.

Localised air pollution incidences with regard to PM<sub>10</sub> and PM<sub>2.5</sub> and noise pollution are both likely to occur when demolition/construction takes place - especially in relation to PM<sub>10</sub> if suppression techniques are not introduced - and when traffic is queuing for long periods of time.

Ireland's current emissions are exceeding targets agreed in the peer review of Ireland's 2006 submission to the United Nations Framework Convention on Climate Change. It is unlikely that Ireland will meet these targets and it is likely therefore that financial penalties will be incurred. Transport related emissions continue to be the dominant growth sector.

The increase in winter runoff indicated for many parts of the West, especially under the EPA's

Climate Change scenario for the period 2061–2090, is likely to have significant implications.

Changes in sea level and/or changes in the occurrence of severe rainfall events as a result of climate change would be likely to increase the occurrence and magnitude of flooding events.

### 3.6.6 Evolution of Air and Climatic Factors in the absence of a Development Plan

An intensification of uses in low land areas may bring about air quality and noise problems.

Increases in the use of catalytic converters, cleaner fuels, better engine technology and maintenance is generally reducing the pollution omitted per motor vehicle however this reduction is probably being offset by the increase in the number of cars as well as the increase in the volume and incidences of traffic congestion. Increases in the number of cars as well as the increase in the volume and incidences of traffic congestion may lead to increases in air and noise pollution in the future.

The Development Plan provides an opportunity to consolidate the Town by locating new residential development closer to the Town Centre and providing pedestrian routes within and between residential areas in the Town Centre. This is designed to reduce trip generation and promote the use of alternative modes of transport other than the car and would therefore be likely to generate less transport related greenhouse gas emissions than populations located further away from the Town Centre. In the absence of a Development Plan this opportunity to prevent the generation of future transport related greenhouse gas emissions would be missed.

If new development or an intensification of existing land uses were to occur in the Plan area 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 a Development Plan, the realisation of objectives relating to energy efficiency, renewable energy and a reduction in transport related emissions contained within the Development Plan would be made more difficult.



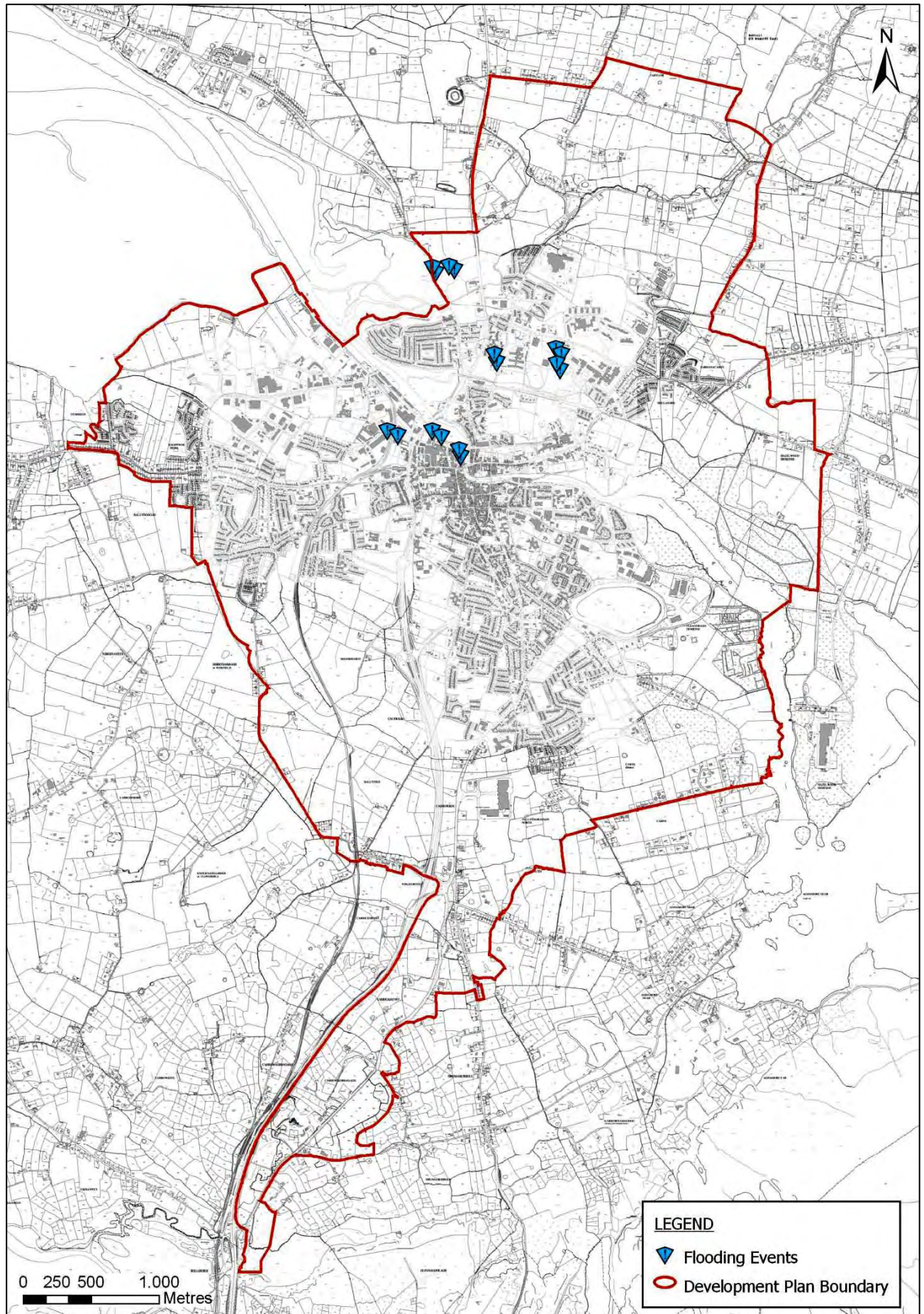


Figure 3.26 Flooding events within the Plan area

## 3.7 Material Assets

### 3.7.1 Waste Water

#### 3.7.1.1 Relevant Legislation

The Urban Waste Water Treatment Directive (91/271/EEC) (amended by Directive 98/15/EEC) aims to protect the environment from the adverse effects of the wastewater discharges by ensuring that wastewater is appropriately treated before it is discharged to the environment. Such treatment is essential in order to meet the requirements of the Water Framework Directive (see Section 3.5).

#### 3.7.1.2 Current Provision of Waste Water Treatment Infrastructure

Waste water arising from the Sligo and Environs Plan area is collected by the waste water collection network and pumped to the Town's recently completed waste water treatment plant at Finisklin. The estimated project cost is €29 million. The design/build phase of the scheme commenced in October 2006. Treated wastewater from the plant is discharged in to the Garavogue Estuary/Sligo Harbour.

Current waste water demand for the Plan area stands at 35,000 PE (Population Equivalent)<sup>37</sup>. The catchment of the WWTP is the entire Plan area and beyond. The WWTP will be taking effluent from Rosses Point in the coming years. The plant was built with PE capacity of 50,000 and is expandable to a PE of 80,000.

#### 3.7.1.3 Sligo Sewerage Scheme (Network Improvement)

This project relates to proposed improvement works to the existing combined sewer network in Sligo Town. The preliminary report for the scheme highlighted twenty-eight sections of the network which require improvement works based on network modeling and local knowledge. Commencement of works was due to begin in 2008 at Pearse Road, O'Connell Street and along the railway track at Thornhill subject to the Department of the Environment Heritage and Local Governments approval. It is

<sup>37</sup> Population equivalent (in waste-water monitoring and treatment) refers to the amount of oxygen-demanding substances whose oxygen consumption during biodegradation equals the average oxygen demand of the waste water produced by one person.

also proposed to carry out CCTV surveys on other parts of the network to establish a prioritised schedule of works which will be advanced to construction stage on a phased basis. The total project cost is estimated at €5.7 million.

In addition to the new wastewater treatment plant, further upgrading of the wastewater drainage infrastructure is on-going to ensure adequate service to all areas.

Figure 3.27<sup>38</sup> maps the WWTP at Finisklin and its outfall point into the Garavogue Estuary/Sligo Harbour.

### 3.7.2 Drinking Water

#### 3.7.2.1 Current Water Supply Infrastructure

There are two main sources of water supplying the Sligo and Environs area namely, a gravity supply from Kilsellagh located to the north of the Town and a pumped supply from Lough Gill to an ozone water treatment plant at Cairns Hill and a plant at Foxes Den.

The Kilsellagh source, whose development dates back to 1884, consists of an impounding reservoir and water treatment works comprising micro-straining, chlorination and fluoridation. Storage was provided via an open topped reservoir at Farranacardy on the pipeline route from the Kilsellagh source to Sligo Town. This source will be upgraded under stage two of the Sligo and Environs Water Supply Scheme, see Section 3.7.2.2.

The Lough Gill source was developed in 1973 to provide increased capacity and serve the outlying rural areas and the high level areas of Sligo that could not be served by the Kilsellagh gravity supply. Treatment is by prechlorination, microstraining, ozonisation, post chlorination and fluoridation.

The Cairns Hill plant still remains the only ozonisation treatment plant in the Country and is currently operating at 1.5 times its design demand. As a consequence it no longer consistently produces treated water in compliance with EU drinking water directives.

<sup>38</sup> Dataset provided by Sligo County Council (various) *Water\_Treatment\_WorksMar08\_font\_point*, *PWPipeobj\_Nov07\_polyline* and *WWTP* GIS datasets Sligo: Sligo County Council



The refurbishment of Cairns Hill was completed in 2002. The plant has a design capacity of 5,450 cubic metres per day.

The provision of the additional plant at Foxes Den allows Sligo County Council the opportunity to refurbish the plant at Kilsellagh, ensuring that the supply meets the required standards. Foxes Den was constructed in 2001, with a design capacity of 11,000 m<sup>3</sup>/day.

Figure 3.27 identifies the locations of water treatment plants at Cairns Hill and Foxes Den and the water supply network in the Plan area.

### **3.7.2.2 Sligo & Environs Water Supply Scheme – Stage Two**

This scheme involves the Design Build & Operation of a new Water Treatment Plant at Kilsellagh, approx. 6.5km north east of Sligo Town. The plant will have a maximum capacity of 400m<sup>3</sup>/hr. The operation contract will include the existing impounding reservoir. Four tenders were received on 31<sup>st</sup> August 2007. The Report on Tenders has been submitted to the DEHLG for approval. It was anticipated that the contract will be awarded in Q3 2008, pending DEHLG approval. The contract period is 15 months. The estimated project cost is €9.62 million.

### **3.7.2.3 Sligo & Environs Water Supply Scheme – Stage Three**

Plans to upgrade the Foxes Den treatment plant to provide 11,000m<sup>3</sup>/day with provision for expansion to 16,500m<sup>3</sup>/day are proposed. The treatment process will consist of:

- Inlet screening;
- Flocculation;
- Flotation using dissolved air;
- Rapid gravity filtration;
- Chlorination and fluoridation.

### **3.7.2.4 EPA Monitoring**

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

An assessment of the safety of drinking water can be carried out by assessing compliance with the requirements of the drinking water quality standards. Compliance with the drinking water requirements is determined by comparing the results of analyses submitted by water suppliers

to the standard for 48 parameters specified in the European Communities (Drinking Water) Regulations (No. 2), 2007. To ensure that these standards are met each water supply must be monitored on a regular basis.

Under Section 58 of the Environmental Protection Agency Act 1992 the EPA is required to collect and verify monitoring results for all water supplies in Ireland covered by the European Communities (Drinking Water) Regulations, 2000. The EPA publishes their results in annual reports. Drinking water quality in Sligo is discussed under the sections below with reference to the most recent EPA report on the subject<sup>39</sup>.

### **3.7.2.5 Assessment of Monitoring**

Sligo County Council carried out analysis on 250 check and 43 audit samples during 2006. No monitoring was carried out in 2 public group water schemes while just one sample was analysed in almost all the remaining public and private group water schemes. Thus insufficient sampling was carried out in all group water schemes in Sligo during 2006. Furthermore, no monitoring was carried out in private water supplies that supply water as part of a public or commercial activity.

### **3.7.2.6 Overall Compliance**

The overall rate of compliance in County Sligo, 96.5%, was slightly below the national average and fell from 97.2% in 2005. Compliance with the microbiological and chemical parametric values was satisfactory in most supplies though compliance with the indicator parametric values was less satisfactory.

Compliance with the parametric values was: microbiological parameters, 98.5%; chemical parameters, 99.7%; and indicator parameters, 94.6%.

### **3.7.2.7 Compliance with E. coli Standard**

There were 3 incidents of E. coli contamination in two public water supplies, the Lough Talt Regional Supply (2 incidents) and the North Sligo Regional Water Supply during 2006. Although there were insufficient numbers of samples analysed in private group water schemes in Sligo in 2006 there was a significant

<sup>39</sup> EPA (2007) *The Provision and Quality of Drinking Water in Ireland: A Report for the Years 2006-2007* Wexford: EPA



improvement in the quality of drinking water. One private group water scheme was contaminated with E. coli during the year down from seven in 2005. This improvement was due to the completion of the North West and South East Sligo DBO bundles which has resulted in the construction of eleven new treatment plants which were brought into service in 2006. The sole scheme that was contaminated during 2006 was not part of either of these bundles.

### 3.7.2.8 Compliance with Chemical and Indicator Parametric Values

Full compliance with 24 of the 26 chemical parametric values was achieved in Sligo during 2006. However, there was one nitrite exceedance in one public group water scheme and three trihalomethanes (THMs) exceedances in the Kilsellagh (2 exceedances) and the Lough Gill Regional water supplies. It is imperative that action is taken to deal with this problem as a more stringent standard for trihalomethanes became effective in 2008.

There were no chemical exceedances in any of the nine private group water schemes monitored in Sligo during 2006. Compliance with the indicator parametric values was less than that of the microbiological and chemical parametric values. The level of compliance in public water supplies with the aluminium (89%), iron (80%) and coliform bacteria (92%) parametric values was low.

The Council must investigate the cause of these failures and implement corrective action to reduce the incidence of failure. Elevated levels of turbidity were recorded in 2 of the 6 supplies monitored indicating that these supplies are operating under risk of Cryptosporidium being present in the drinking water if present in the raw water. The local authority should review the operation of these plants to ensure that treatment is appropriate to reduce the risk. The upgrade of the private group water schemes in Sligo has resulted in an improvement in compliance with the coliform bacteria standard from 46% in 2005 to 77% in 2006 though it is still in need of further improvement.

Sligo County Council must increase monitoring of the group water schemes in the County. It is imperative that there is verification that the significant sums of money spent upgrading these schemes have been worthwhile.

### 3.7.2.9 EPA Remedial Action List of Public Water Supplies

The EPA identified<sup>40</sup> the Kilsellagh supply and the Lough Gill supply on a remedial action list as two of 339 public water supplies - representing 36% of public drinking water supplies - that require detailed profiling to ensure that the supply is providing clean and wholesome drinking water.

The Kilsellagh supply was included on the list for inadequate treatment for Cryptosporidium and the Lough Gill supply was included for having elevated levels of THM's above the current standard in the Drinking Water Regulations.

### 3.7.3 Waste Management

The Plan area is covered by a waste collection service and a kerbside dry recycling collection service.

Waste collected by permitted refuse collection companies is transported to two neighbouring landfills - Ballaghadreen Landfill, Co. Roscommon and Rathroeen Landfill, Ballina, Co. Mayo.

Sligo County Council provides a household hazardous waste collection service, which also serves the Sligo Borough area. This takes the form of a mobile collection unit which accepts hazardous household waste for recycling. The provision of a permanent facility for Sligo is under consideration.

There are eight recycling bring-banks, which accept glass and cans for recycling. A recycling centre is located at the Greenstar Depot (Deep Water Quay) where the public can bring dry recyclables, textiles and electrical goods.

A composting facility was recently opened at Ballysadare.

### 3.7.4 Vehicular Circulation

Sligo is the largest transportation node in the North-West. It is connected to Dublin (via Carrick-on-Shannon) by the National Primary Road N4. Other national primary and secondary roads connect Sligo with Belfast (via Enniskillen), Derry and Letterkenny (via Donegal

<sup>40</sup> EPA (2007) *The Provision and Quality of Drinking Water in Ireland: A Report for the Years 2006-2007* Wexford: Environmental Protection Agency

Town), Galway, Ballina, and other urban centres.

The Sligo Local Authorities are working with the Department of the Environment, Heritage and Local Government, the Department of Transport and the National Roads Authority to develop a transport infrastructure. The newly opened Sligo Inner Relief Road has resulted in major benefits to motorists, and will also facilitate the pedestrianisation of Town Centre streets. Proposals for a Western Distributor Road, a Western by-pass and Eastern link are identified in the Sligo & Environs Development Plan.

Vehicular traffic congestion arising from local and through traffic is a problem in the Town Centre. *Traffic hotspots* have implications in terms of air and noise pollution. This is discussed in Section 3.6.

Figure 3.28<sup>41</sup> illustrates the Plan areas existing road and rail networks.

### 3.7.5 Existing Problems

While most of the Sligo and Environs Plan area is serviced or serviceable by wastewater drainage infrastructure, certain areas of the Environs are not within the catchment of the waste water treatment network and consequently development in these areas use septic tanks to treat waste water arising.

The Councils' ability to meet their commitments under the Water Framework Directive (see Section 3.5.3) could be compromised. The Garavogue Estuary and Sligo Harbour, to which treated waste water is discharged, are both *at significant risk of failing* to achieve the WFD's objectives of good status by 2015. The commissioning of the waste water treatment plant at Finisklin will help to alleviate pollution pressures on the Estuary and the Bay.

The EPA identified<sup>42</sup> the Kilsellagh supply and the Lough Gill supply on a remedial action list as two of 339 public water supplies - representing 36% of public drinking water supplies - that require detailed profiling to ensure that the

supply is providing clean and wholesome drinking water.

Increases in the Plan area's population as a result of tourism can result in increased demand being placed on water supply infrastructure, and wastewater infrastructure and increased pressures on biodiversity.

### 3.7.6 Evolution of Material Assets in the absence of a Development Plan

In the absence of a Development Plan, there would be no framework to provide the infrastructure which is necessary across the Sligo and Environs Area to serve existing and proposed development such as waste water treatment plants and networks, water supply infrastructure, transport infrastructure and powerlines etc.

Failure to provide sufficient infrastructure for development would be likely to result in significant adverse impacts. For example, failure to upgrade and provide new waste water infrastructure would be likely to adversely impact upon water quality and indirectly significantly adversely impact upon biodiversity and flora and fauna, drinking water supplies and human health.

<sup>41</sup> Dataset provided by Sligo County Council (Various) *Road and Rail network GIS dataset* Sligo: Sligo County Council

<sup>42</sup> EPA (2007) *The Provision and Quality of Drinking Water in Ireland: A Report for the Years 2006-2007* Wexford: Environmental Protection Agency



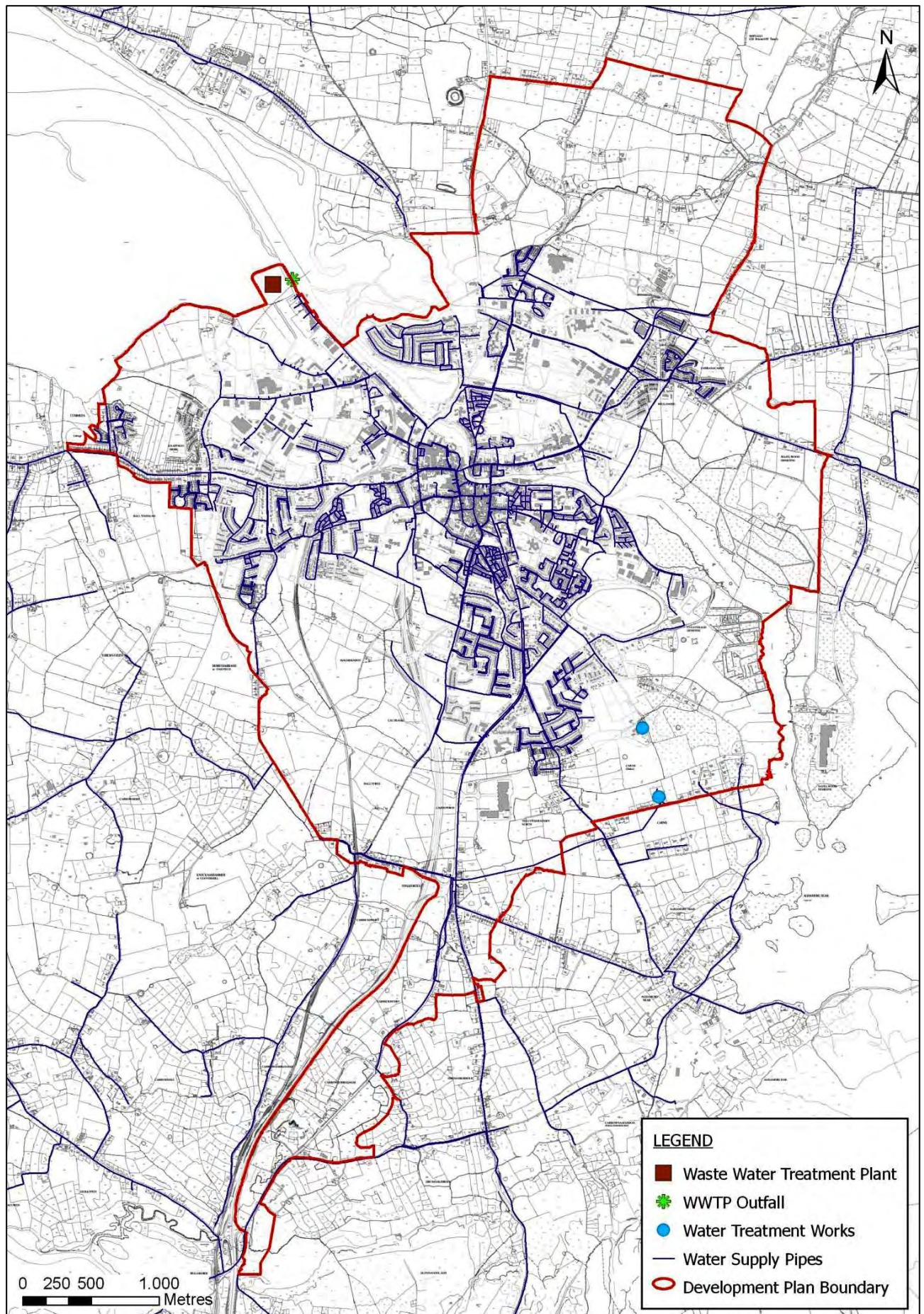


Figure 3.27 Location of Water Treatment Works, water supply pipes and WWTP



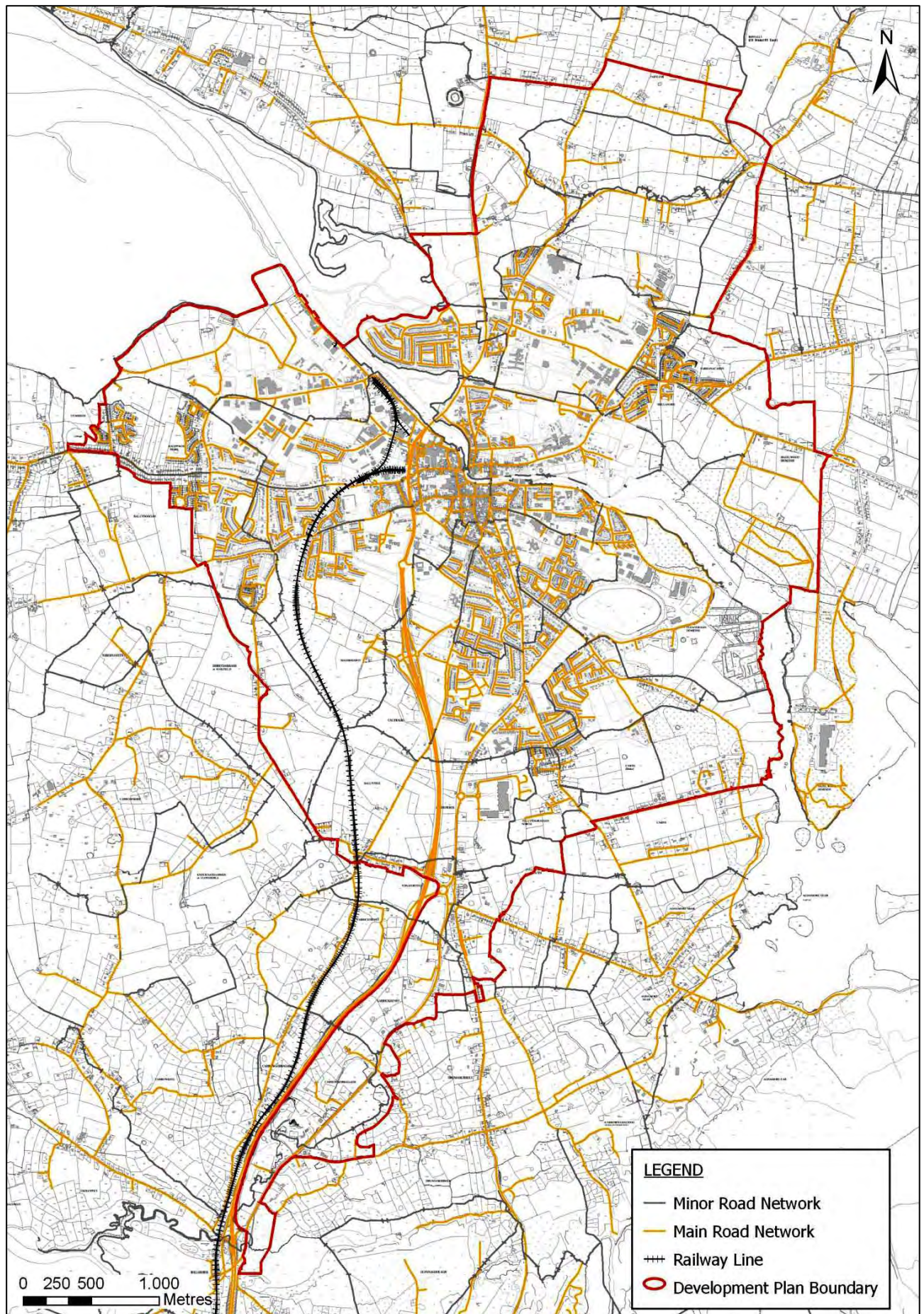


Figure 3.28 Existing Road and Rail Network



## 3.8 Cultural Heritage

### 3.8.1 Introduction

Heritage, by definition, means inherited properties, inherited characteristics and anything transmitted by past ages and ancestors. It covers everything, from objects and buildings to the environment. Cultural heritage includes physical buildings, structures and objects complete or in part, which have been left on the landscape by previous and indeed current generations.

The heritage of Sligo and Environs is a unique resource which is fundamental to the cultural identity of the area and the quality of life of its citizens - it is central to how we see ourselves and to our identity as individuals and communities. Historic buildings can define localities and communities within the area and can become a focus of community identity and pride. An historic church or park, for example, can help define a neighbourhood and create a sense of local cohesion.

### 3.8.2 Archaeological Heritage

#### 3.8.2.1 Introduction

Archaeology is the study of past societies through the material remains left by those societies and the evidence of their environment. Archaeological heritage consists of such material remains (whether in the form of sites and monuments or artefacts in the sense of moveable objects) and environmental evidence. As archaeological heritage can be used to gain knowledge and understanding of the past it is of great cultural and scientific importance. Archaeological sites and monuments vary greatly in form and date; examples include earthworks of different types and periods, (e.g. early historic ringforts and prehistoric burial mounds), megalithic tombs from the Prehistoric period, medieval buildings, urban archaeological deposits and underwater features such as wrecks.

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

Archaeology in its various forms ranging from fragmentary buried remains to the fabric and contents of modern domestic and industrial buildings is a vital component of the culture, conservation and redevelopment of Sligo and Environs.

#### 3.8.2.2 Record of Monuments and Places

The area covered by the Sligo and Environs Development Plan is rich in archaeological interest, containing traces of social activity dating from 7000 B.C, including significant remains from the pre-Christian period. The most significant element among these is Sligo Town itself and the megalithic cemetery at Carrowmore.

There are almost 300 recorded monuments within the Plan area. Associated with each Recorded Monument is a Zone of Archaeological Potential (ZAP) which in some cases may be quite extensive. Its associated ZAP indicates where archaeology is known to be present.

The group of megalithic tombs at Carrowmore represents one of four major passage tomb cemeteries in Ireland. There are approximately 30 passage-tombs, which date from around 4000 BC or earlier, as suggested from excavations. This site formed an important ritual centre for the Stone Age inhabitants of the Cuil Irra (Knocknarea) peninsula and perhaps further afield. Monuments of later periods, barrows (earthen burial mounds) and ringforts occur in the vicinity of the cemetery area with a number of isolated passage-tombs on the eastern edge of Sligo Town. The Carrowmore site can be seen as a cluster of entries to the record of monuments and places on Figure 3.29<sup>43</sup>.

### 3.8.3 Architectural heritage

#### 3.8.3.1 Introduction

The term architectural heritage is defined in the Architectural Heritage (National Inventory) and Historic Monuments Act 1999 as meaning all: structures and buildings together with their settings and attendant grounds, fixtures and fittings; groups of structures and buildings; and, sites which are of technical, historical, archaeological, artistic, cultural, scientific, social,

<sup>43</sup> Dataset provided by Sligo County Council (2005) *Sligo County Development Plan 2005-2011, Monuments in County Sligo GIS dataset* Sligo: Sligo County Council

or technical interest. Entries to the National Inventory of Built Heritage are mapped on Figure 3.31<sup>44</sup>.

### 3.8.3.2 Record of Protected Structures

The Record of Protected Structures (RPS) included in the current Development Plan is legislated for under Section 51 of the Planning and Development Act 2000. The Sligo and Environs Plan area has an important built heritage with circa 360 structures listed for protection on the Record of Protected Structures. Entries to the Record of Protected Structures for the Plan area and its surrounds can be seen on Figure 3.30<sup>45</sup>.

Protected Structures are defined as structures, or parts of structures that are of special interest from an architectural, historical, archaeological, artistic, cultural, scientific, social or technical point of view.

In relation to a protected structure or proposed protected structure, the following are encompassed:

- (i) the interior of the structure;
- (ii) the land lying within the curtilage<sup>46</sup> of the structure;
- (iii) any other structures lying within that curtilage and their interiors; and,
- (iv) all fixtures and features which form part of the interior or exterior of any

<sup>44</sup> DEHLG (2004) *National Inventory of Architectural Heritage Survey of County Sligo 2004 GIS dataset* Dublin: Government of Ireland

<sup>45</sup> Dataset provided by Sligo County Council (2005) *Sligo County Development Plan 2005-2011, Record of Protected Structures GIS dataset* Sligo: Sligo County Council

<sup>46</sup> Curtilage is normally taken to be the parcel of ground immediately associated with the Protected Structure, or in use for the purposes of the structure. Protection extends to the buildings and land lying within the curtilage. While the curtilage sometimes coincides with the present property boundary, it can originally have included lands, features or even buildings now in separate ownership, e.g. the lodge of a former country house, or the garden features located in land subsequently sold off. Such lands are described as being attendant grounds, and the protection extends to them just as if they were still within the curtilage of the Protected Structure.

structure or structures referred to in subparagraph (i) or (iii).

### 3.8.3.3 Architectural Conservation Areas

An ACA is a place, area or group of structures or townscape which is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or value, or contributes to the appreciation of protected structures, whose character it is an objective to preserve in a development plan. The ACA designation requires that planning permission must be obtained before significant works can be carried out to the exterior of a structure in the ACA which might alter the character of the structure or the ACA.

A total of five Architectural Conservation Areas are proposed for Sligo:

1. Market Cross ACA
2. Courthouse ACA
3. Cathedral ACA
4. Wolfe Tone Street ACA
5. O'Connell Street ACA

### 3.8.4 Existing Environmental Problems

Archaeology can be previously unknown but can be damaged through development causing ground disturbance.

Development which involves material alteration or additions to protected structures can detract from the special character of the structure and its setting, and have the potential to result in the loss of features of architectural or historic interest and the historic form and structural integrity of the structure are retained. Development on sites adjoining protected monuments, places or structures can also impact upon the setting of these cultural heritage items.

Encouraging and facilitating the accommodation of growth on brownfield sites will contribute to mitigating a number of the adverse impacts associated with greenfield development, however, brownfield development has the potential to significantly adversely impact upon cultural heritage - both archaeological and architectural - if mitigation measures are not put in place.



The cumulative accommodation of large scale development in Sligo and Environs has the potential to cumulatively impact upon cultural heritage as well as the settlement patterns of the Plan.

### **3.8.5 Evolution of Cultural Heritage in the absence of a Development Plan**

In the absence of Development Plan, the evolution of cultural heritage would be dependent on developments which take place. Such development would have no guidance as to where to be directed and planning applications would be assessed on an individual basis with cultural heritage protected under a number of strategic actions relating to archaeological and architectural protection. Beneficial impacts upon the protection of cultural heritage which would be likely to arise as a result of the Plan provisions would not necessarily occur.

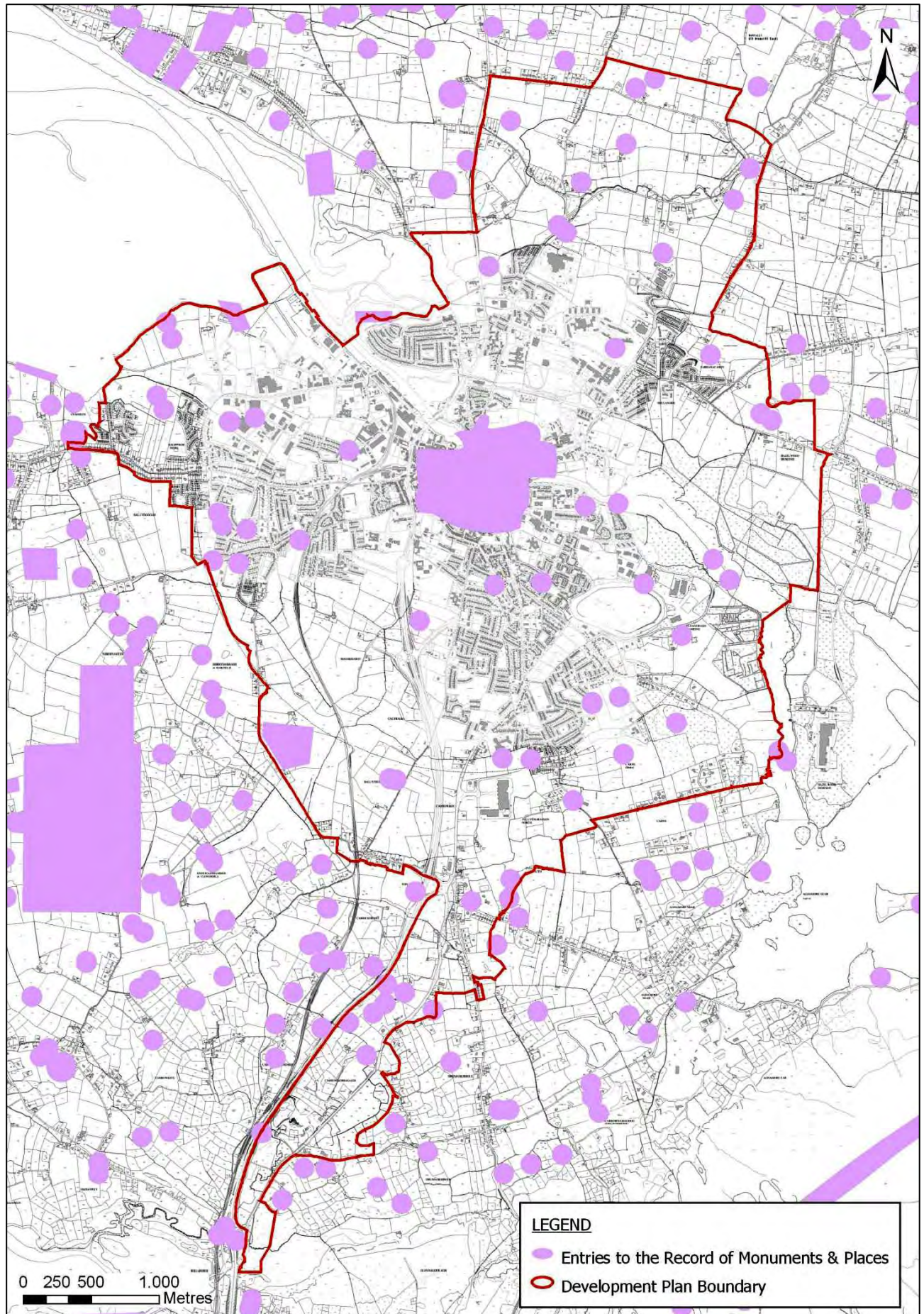
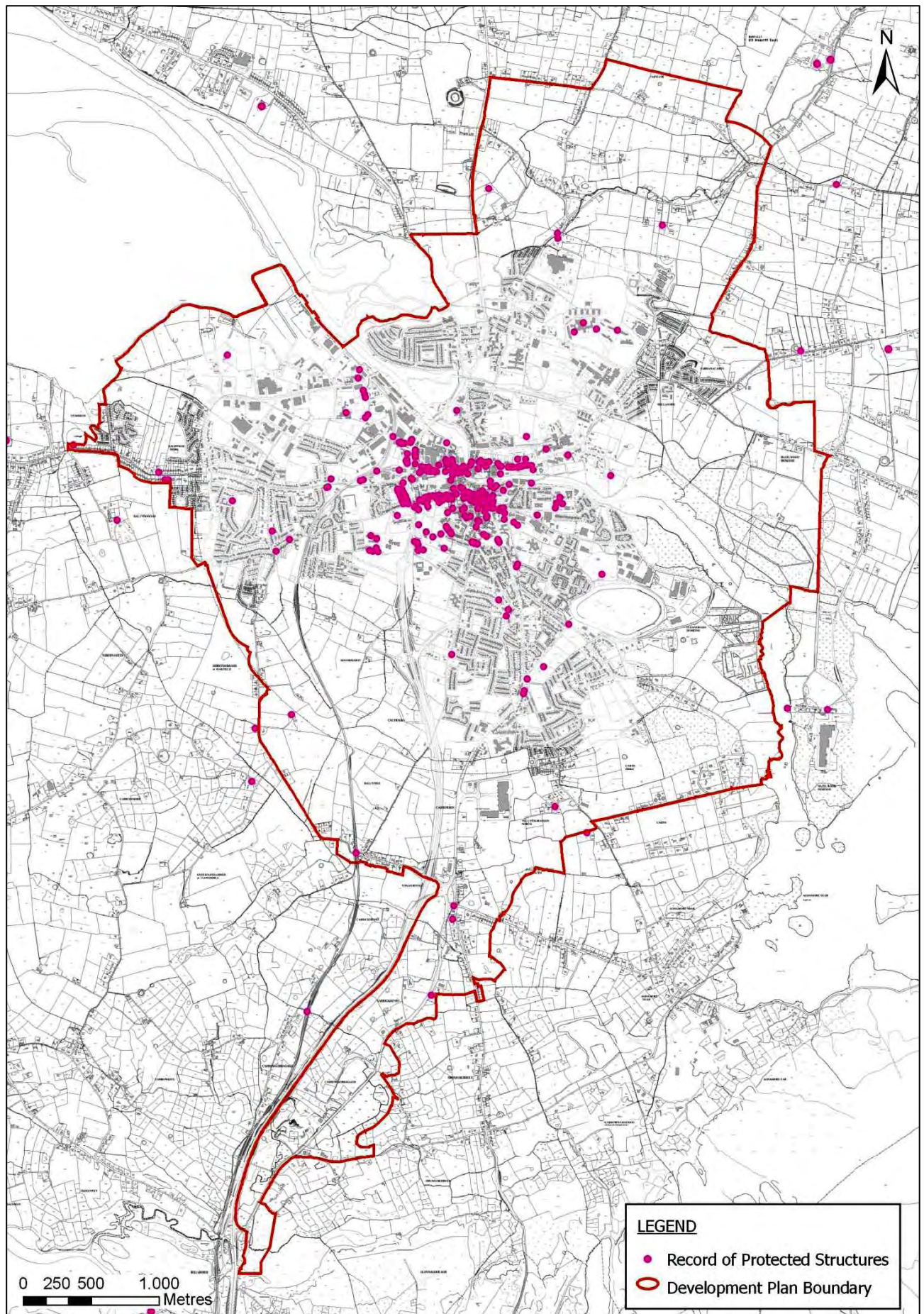


Figure 3.29 Archaeological Heritage: Entries to the Record of Monuments and Places





**Figure 3.30 Record of Protected Structures**



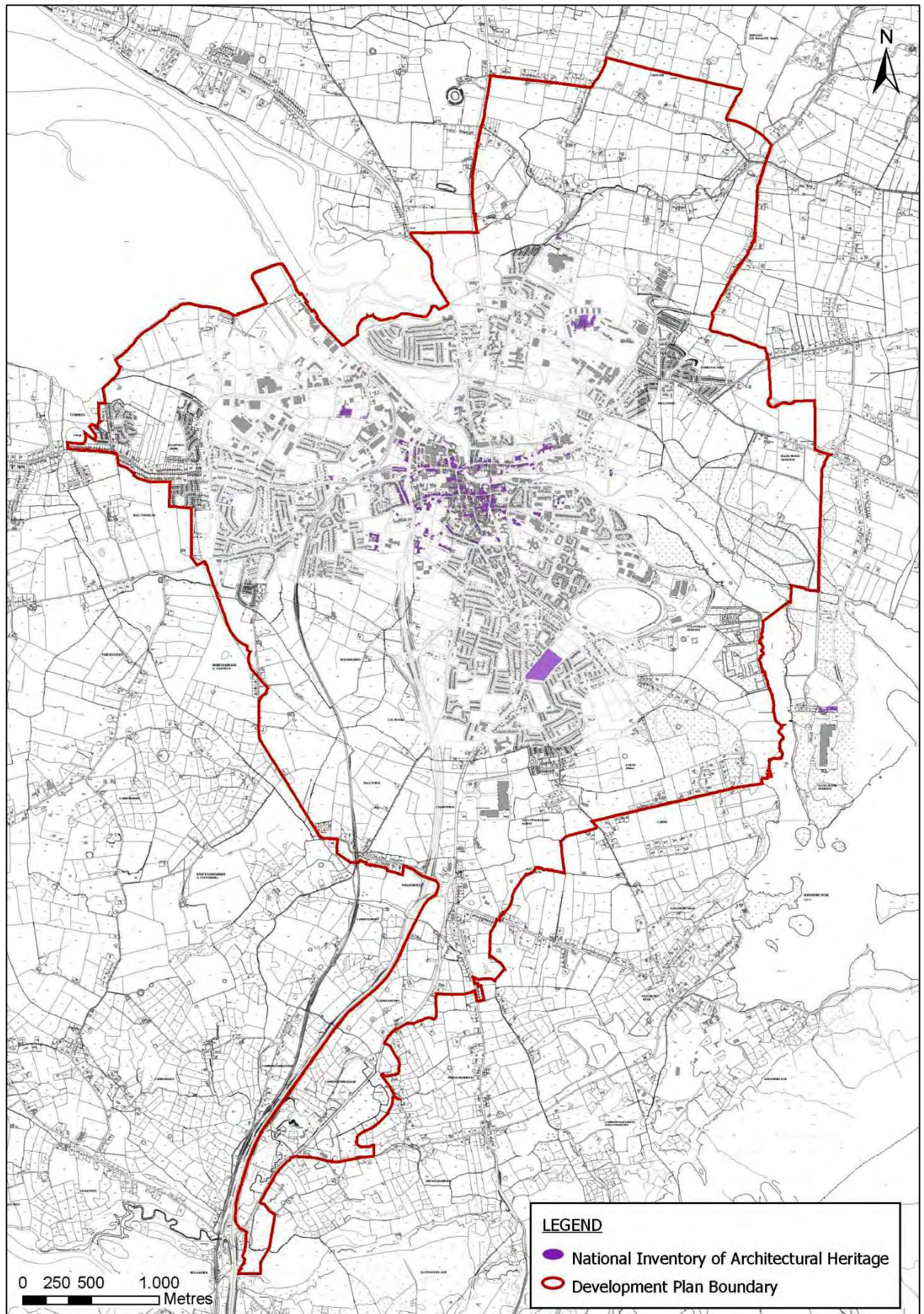


Figure 3.31 National Inventory of Architectural Heritage



## 3.9 Landscape

### 3.9.1 Introduction

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

Sligo is situated at the mouth of the Garavogue River which connects Lough Gill and Sligo Harbour. It is surrounded by mountains-Benbulbin (526m) and Truskmore (645m) to the north, Knocknaera to the West and the Ox mountains to the South.

Sligo comprises an undulating landscape, giving scenic views of Lough Gill (particularly from Green Road), of seascapes (particularly at Gibraltar Point) and distant views of the surrounding hills and mountains as mentioned above.

Directly to the north of the Town the topography rises sharply to incorporate the Green Fort. There is also an area of significant high ground to the south east of the Town near Cairns and Tonaphubble; this area is clearly visible from the Town, with significant views over Lough Gill, Hazelwood Demesne and the Town itself. Cleveragh Drive forms a scenic route along the west of Lough Gill, with viewing points along this road and also along The Green Road. Aghamore Bay is another important viewing point for Lough Gill.

### 3.9.2 Scenic Evaluation Study

CAAS, on behalf of Sligo County Council, prepared a Scenic Evaluation Study for the County in 1997. The objective of the report therefore was to map the areas of County Sligo according to their capacity to absorb new development without disproportionately changing the distinctiveness and character of the overall landscape. This resulted in a Development Control Policy Map, which formed part of the current Sligo County Development Plan 2005-2011.

The County Development Plan designates the following landscape classifications:

#### 3.9.2.1 Normal Rural Landscapes

Areas with natural enclosing features (e.g. topography, vegetation), which have the capacity to absorb a wide range of new development forms – these are the main farming areas of the County.

#### 3.9.2.2 Sensitive Rural Landscapes

Areas that tend to be open in character, with intrinsic scenic quality and a low capacity to absorb new development. Sensitive Rural Landscapes generally comprise the elevated areas, including lands to the south and south east of the Town.

#### 3.9.2.3 Visually Vulnerable Areas

Distinctive and conspicuous natural features of significant natural beauty or interest, which have extremely low capacity to absorb new development. Visually vulnerable areas exist along the coast and along the banks of the Garavogue River.

#### 3.9.2.4 Scenic Routes

Public roads that coincide generally with popular tourist routes passing through or close to Sensitive Rural Landscapes, or adjoining Visually Vulnerable Areas, and affording unique scenic views of one or more distinctive natural features. A number of scenic routes exist mainly in the eastern and central parts of the Plan area.

Figure 3.33<sup>47</sup> maps these classifications for the Plan area. The unclassified areas on the map comprise “Normal Rural Landscapes” with Sligo’s urban area classified as “Robust”.

Figure 3.34<sup>48</sup> maps the Protected Scenic Routes from the current Sligo County Development Plan 2005-2011.

<sup>47</sup> CAAS (1997) *Landscape Characterisation and Appraisal Study GIS dataset* Sligo: Sligo County Council

<sup>48</sup> Dataset provided by Sligo County Council, Ordnance Survey Ireland (unknown) *10, 20 and 50m Contours GIS dataset* Dublin: Ordnance Survey Ireland

### **3.9.3 Cuil Irra Peninsula**

The archaeological landscape of the Cuil Irra (Knocknarea) peninsula lies to the south west of the Plan area.

Providing a focus at the centre of the peninsula is the megalithic cemetery at Carrowmore comprising an oval-shaped cluster of 30 monuments surrounding the centrally placed cairn of "Listoghil".

To the west of the peninsula and overlooking Carrowmore megalithic cemetery from the summit of Knocknarea Mountain is the iconic flat-topped cairn known as Miosgán Meadhbha (Maeve's Cairn).

To the east of Cuil Irra and again overlooking Carrowmore are two large cairns on the summit of Carns Hill. The cairns are comparable in size to Maeve's Cairn on the summit of Knocknarea.

### **3.9.4 Existing Environmental Problems**

A problem with regard to the environmental component of landscape is the cumulative visual impact which occurs as a result of developments such as one off houses. Such developments, which individually often do not have significant adverse impacts, have the potential to cumulatively and adversely significantly impact upon sensitive landscapes. This is especially problematic in the sensitive parts of the

landscape including the visually prominent, elevated parts of the Sligo hinterland and areas along the coastline.

### **3.9.5 Evolution of Landscape in the absence of a Development Plan**

In the absence of a Development Plan, development would be likely to occur on a one-off, dispersed basis. As outlined above, this would have cumulative impacts on the landscape.

The absence of a Development Plan may see the expansion of a semi-urban footprint of Sligo Town.



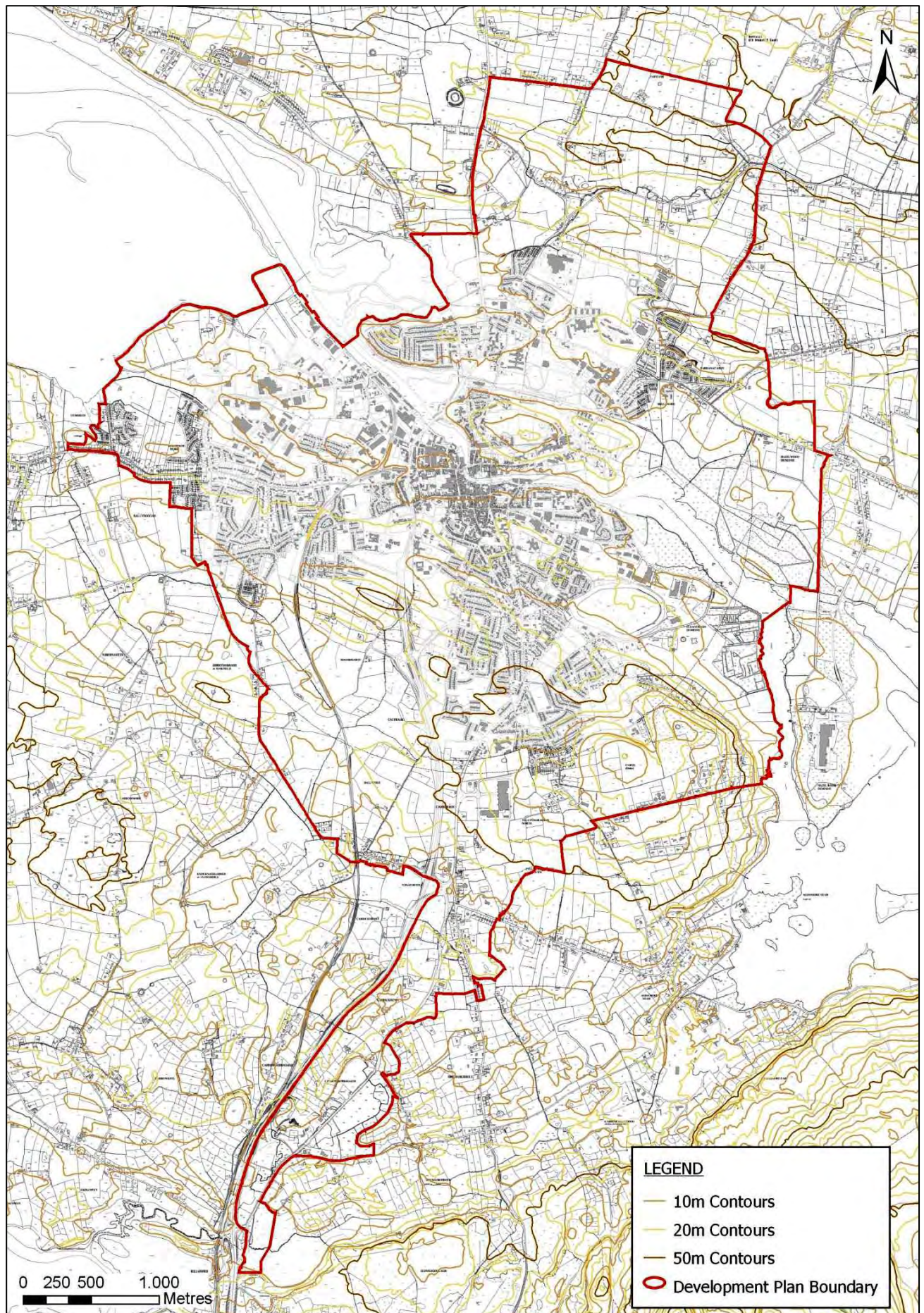
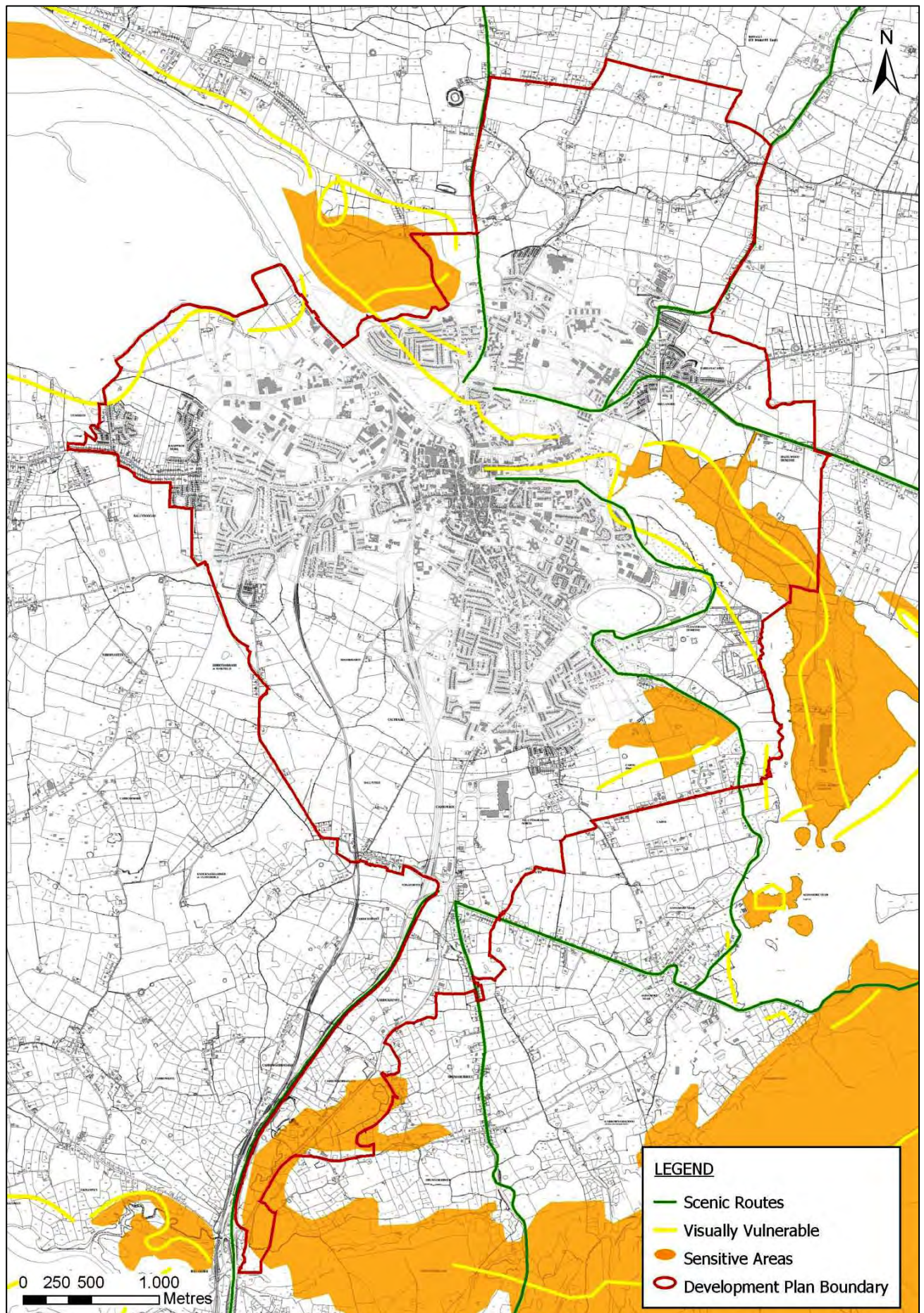


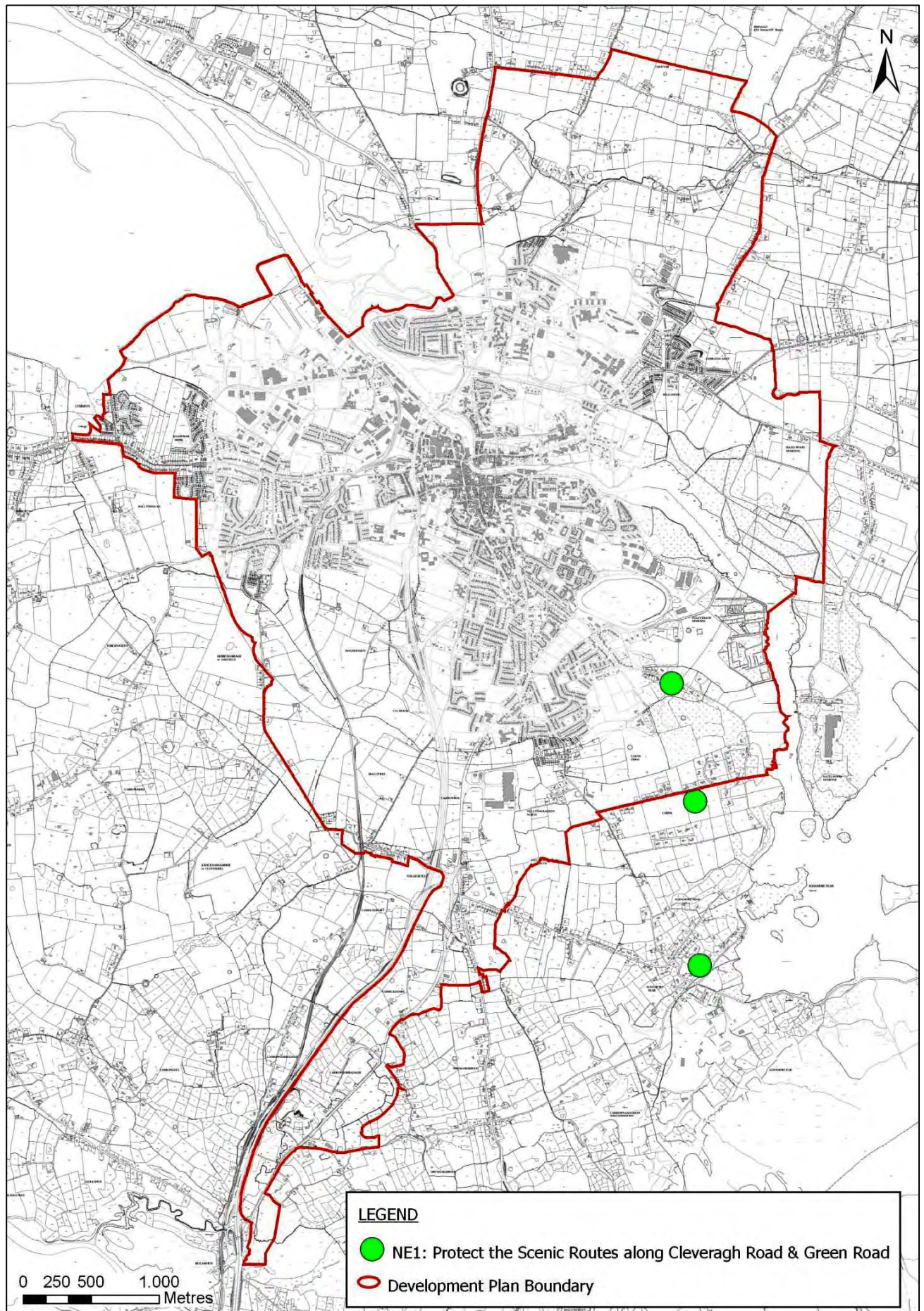
Figure 3.32 Topography (Contours)





**Figure 3.33 Landscape Sensitivities and Scenic Routes**





**Figure 3.34 Protected Scenic Routes from current Sligo CDP**

## 3.10 Overlay Mapping of Environmental Sensitivities

### 3.10.1 Introduction

In order to identify where most sensitivities within and adjacent to the Plan area occur, a number of the environmental sensitivities described above were weighted and mapped overlapping each other.

Environmental sensitivities are indicated by colours which range from extreme vulnerability (red) to high vulnerability (orange) to moderate vulnerability (yellow) and low vulnerability (green). Where the mapping shows a concentration of environmental sensitivities there is an increased likelihood that development will conflict with these sensitivities and cause environmental deterioration. This is particularly the case where the cumulative development of small-scale projects, such as rural housing, gradually causes a slow deterioration of a resource, such as water quality.

Figure 3.35 provides an overlay of environmental sensitivities in and adjacent to Sligo and Environs.

### 3.10.2 Methodology

A weighting system applied through Geographical Information System (GIS) software was used in order to calculate the vulnerability

of all areas in the Sligo and Environs. Equal value is given to all environmental components (landscape, water, biodiversity etc.).

The scale of sensitivity for each area of the Plan area corresponds to the sensitivity factors: 5 points corresponds to one sensitivity factor; 10 points corresponds to two sensitivity factors; 20 points corresponds to four sensitivity factors (and so on).

The scores for each area are added together in order to determine overall vulnerability as is shown on Table 3.3.

Score	Vulnerability Class
5-15	Low
20-35	Moderate
40-50	High
>60	Extreme

**Table 3.3 Overall Vulnerability Classes**

Generally, the north and south of the Plan area are of low vulnerability. The central area is mainly of moderate vulnerability. Lough Gill, the Garavogue River and its estuary are classified as highly or extremely vulnerable.

### 3.10.3 Use of the Overlay Mapping

Although there are limitations and elements of subjectivity to the overlaying of sensitivities the overlay mapping was used in order to speedily identify the areas where conflicts between development within the Plan area and environmental sensitivities would be likely to occur if unmitigated.



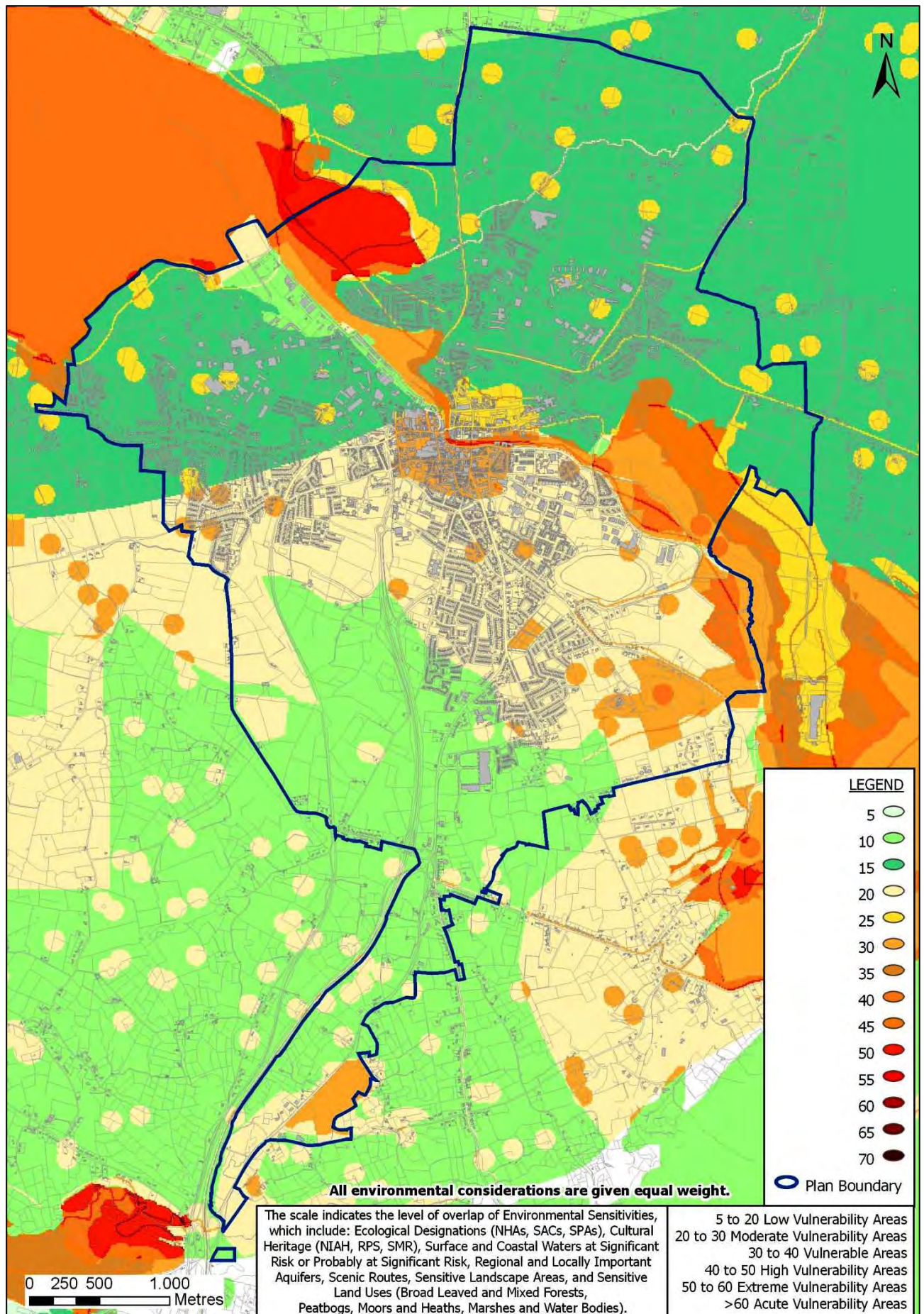


Figure 3.35 Weighted Overlay of Environmental Sensitivities

## Section 4 Strategic Environmental Objectives

### 4.1 Introduction

Strategic Environmental Objectives (SEOs) are methodological measures against which the environmental effects of the Development Plan can be tested. If complied with in full, SEOs would result in an environmentally neutral impact from implementation of the plan. The SEOs are set out under a range of topics and are used as standards against which the provisions of the Plan can be evaluated in order to help identify areas in which significant adverse impacts are likely to occur, if unmitigated.

SEOs are distinct from the objectives of the Plan - although they will often overlap - and are developed from international, national, regional and county policies which generally govern environmental protection objectives. Such policies include those of various European Directives which have been transposed into Irish law, all of which are intended to be implemented at county level in Sligo and integrated into any plan for Sligo and Environs.

The SEA Directive requires that the evaluation of plans be focused upon the relevant aspects of the environmental characteristics of areas likely to be significantly affected. In compliance with this requirement, SEOs have been developed for the relevant environmental components of this SEA. Focus has been developed throughout the SEA, from the scoping stage to the compilation of the existing environmental baseline. Most attention has been given to environmental components which are likely to be impacted as a result of implementation of a Development Plan.

A number of SEOs are linked to indicators which can facilitate monitoring the implementation of the Development Plan, as well as to targets which the Plan can help work towards.

The primary source used in formulating the SEOs was Table 4B of the SEA Guidelines (DEHLG, 2004)<sup>49</sup>. This list has been amended to give affect to objectives that are considered relevant to this Plan. The use of SEOs, although

not a statutory requirement, does fulfil obligations set out in Schedule 2B of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004).

### 4.2 Biodiversity, Flora and Fauna

#### 4.2.1 International, European and National Strategic Actions

##### 4.2.1.1 UN Convention on Biological Diversity 1992

The United Nations Convention on Biological Diversity 1992 requires the promotion of the conservation and sustainable use of biodiversity.

##### 4.2.1.2 National Biodiversity Plan 2002

The preparation and implementation of Ireland's National Biodiversity Plan 2002<sup>50</sup> complies with an obligation under the UN Convention on Biological Diversity. The overall goal of the Plan is to secure the conservation, including where possible the enhancement and sustainable use of biological diversity in Ireland and to contribute to conservation and sustainable use of biodiversity globally. Objectives following on from this goal are to:

- Conserve habitat diversity, including all sites of special biodiversity importance;
- Conserve species diversity;
- Conserve genetic diversity, both wild and domesticated; and
- Contribute to the conservation and sustainable use of biodiversity and to advancing other obligations of the Convention on Biological Diversity in the EU, regionally and internationally.

<sup>49</sup> DEHLG (2004) *Implementation of SEA Directive (2001/42/EC): Guidelines for Regional Authorities and Planning Authorities* Dublin: Government of Ireland.

<sup>50</sup> Department of Arts, Heritage, Gaeltacht and the Islands (2002) *National Biodiversity Plan* Dublin: Government of Ireland



#### **4.2.1.3 Habitats Directive 1992**

The European Council Directive on the Conservation of natural habitats and of wild fauna and flora (92/43/EEC), referred to as the Habitats Directive, aims to ensure the conservation of certain natural habitats and species which are at favourable conservation status. Article 10 of the Habitats Directive recognises the importance of ecological networks as corridors and stepping stones for wildlife, including for migration, dispersal and genetic exchange of species of flora and fauna. The Directive requires that ecological connectivity and areas of ecological value outside the network of designated ecological sites are maintained and it recognises the need for the management of these areas through land use planning and development policies.

Special Areas of Conservation (SACs) are designated and protected under the Habitats Directive 1992 (92/43/EEC) due to their conservation value for habitats and species of importance in the European Union. In Ireland, the habitats and species occurring in SACs are protected from effects of development occurring outside their boundaries under Section 18 "Prohibition of works on lands outside a European site" of the European Communities (Natural Habitats) Regulations 1997. The Regulations require that where a development is proposed to be carried out, on any land that is not within a protected site and is liable to have an adverse impacts on the protected site in question, including direct, cumulative and indirect impacts, an appropriate assessment, which conforms to an environmental impact assessment, of the likely effects of the proposed development on the site is undertaken. Depending on the conclusions of this assessment such development may be refused planning permission.

The Habitats Directive seeks to establish Natura 2000, a network of protected areas throughout the EU. It is the responsibility of each member state to designate SACs to protect habitats and species, which, together with the SPAs designated under the 1979 Birds Directive, form Natura 2000.

#### **4.2.1.4 Birds Directive 1979**

The 1979 European Council Directive on the Conservation of Wild Birds (79/409/EEC), referred to as the Birds Directive, - as well as its amending acts - seek to: protect, manage and

regulate all bird species naturally living in the wild within the European territory of the Member States, including the eggs of these birds, their nests and their habitats; and regulate the exploitation of these species.

Special Protection Areas (SPAs) are provided protection under the Directive and have been designated by the DEHLG due to their conservation value for birds of importance in the European Union.

#### **4.2.1.5 Wildlife Act 1976 and Wildlife (Amendment) Act 2000**

Natural Heritage Areas are designated and protected due to their national conservation value for ecological and/or geological/geomorphological heritage under the Wildlife (Amendment) Act 2000.

#### **4.2.1.6 Convention on Wetlands of International Importance**

The Convention of Wetlands of International Importance, especially as Water Fowl Habitat, was established at Ramsar in 1971 and ratified by Ireland in 1984. The main aim of the Convention is to secure the designation by each contracting state of wetlands in its territory for inclusion in a list of wetlands of international importance for waterfowl. This entails the commitment of each contracting state to a policy of protection and management of the designated wetlands, and of formulating and implementing planning so as to promote the conservation of designated wetlands and, as far as possible, the wise use of wetlands in its territory.

### **4.2.2 Lough Gill Catchment Management Plan**

A management plan for the Lough Gill Catchment has been established through a joint initiative co-financed by Sligo County Council, Leitrim County Council, the Institute of Technology, Sligo and the European Union Life Programme.

The Plan provides a framework to address issues which arose during the course of the Lough Gill Project, some through the public consultation and the Catchment Management Committee process, and others which became apparent as a result of monitoring studies which were carried out. These arise across a wide range of sectors such as water quality, fisheries,

forestry, nature conservation, planning and development, agriculture, tourism and recreation, navigation, drainage and the cultural heritage. The Plan is unique in that it was drafted through consensus between the local authorities, other relevant statutory bodies, voluntary organisations and local community groups, and it represents a multi-sectoral partnership approach to catchment management.

A management strategy for each sector was agreed and environmental quality objectives and standards were set out where appropriate. Each issue identified was given a priority rating for action (Immediate, High, Medium, Low and Aspiration), and responsibilities were assigned for undertaking the action and assessing its impacts. Issues which have been classified as requiring Immediate action are to be tackled within the first year of the Plan, issues classified as High within the next two years, and those classified as Medium in the following two years of a five-year period overall.

In the sixth year, progress on Low Priority and Aspirational activities will also be reviewed and reclassified into higher orders of priority. A new Management Plan will then be drawn up for the next six year period.

### 4.2.3 SEOs, Indicators and Targets

The following SEOs, Indicators and Targets have been developed with regard to the baseline for biodiversity and flora and fauna and the objectives of the above strategic actions.

<b>SEO B1:</b>	To avoid loss of relevant habitats, geological features, species or their sustaining resources in designated ecological sites
<b>Indicator B1:</b>	Percentage of relevant habitats and designated ecological sites lost as a result of implementation of the Plan
<b>Target B1:</b>	No losses of relevant habitats, species or their sustaining resources in designated ecological sites as a result of implementation of the Plan

<b>SEO B2:</b>	To avoid significant adverse impacts, including direct, cumulative and indirect impacts, to relevant habitats, geological features, species or their sustaining resources in designated ecological sites by development within or adjacent to these sites
<b>Indicator B2:</b>	Number of significant adverse impacts, including direct, cumulative and indirect impacts, to relevant habitats, geological features, species or their sustaining resources in designated ecological sites by development within or adjacent to these sites as a result of implementation of the Plan
<b>Target B2:</b>	No significant adverse impacts, including direct, cumulative and indirect impacts, to relevant habitats, geological features, species or their sustaining resources in designated ecological sites by development within or adjacent to these sites as a result of implementation of the Plan



<b>SEO B3:</b>	To sustain, enhance or - where relevant - prevent the loss of ecological networks or parts thereof which provide significant connectivity between areas of local biodiversity
<b>Indicator B3:</b>	Percentage loss of connectivity between areas of local biodiversity as a result of implementation of the Plan – as evidenced from a resurvey of CORINE mapping
<b>Target B3:</b>	No ecological networks or parts thereof which provide significant connectivity between areas of local biodiversity to be lost without remediation as a result of implementation of the Plan

## 4.3 Population and Human Health

### 4.3.1 Population

#### 4.3.1.1 Introduction

The impacts of implementing the Development Plan on both the spatial distribution of population and the nature of development (with regard to greenfield and brownfield development) within Sligo Environs and across the wider region relates to SEO S1 which aims to maximise sustainable brownfield development.

#### 4.3.1.2 National Spatial Strategy 2000-2020

In order to promote sustainable development and allow for public transport systems to function more effectively - as promoted by the NSS - it is essential to consolidate the physical growth of Sligo and Environs.

#### 4.3.1.3 Other DEHLG Guidelines

The DEHLG's Residential Density Guidelines 1999 and the DEHLG's Sustainable Residential Development in Urban Areas Draft Guidelines 2008 recommend planning authorities to promote higher residential densities, particularly in redeveloping 'brownfield' sites and in proximity to town centres and public transport corridors.

### 4.3.2 Human Health

The impact of implementing the Plan on human health is determined by the impacts which the Plan has upon environmental vectors.

Emission limits for discharges to air, soil and water are set with regards to internationally recognised exposure limit values. These are generally set to be many times the safe exposure limit - in order to provide protection. In the event that a land-use began to have adverse health effects on surrounding populations it is likely that it would have been identified as being in breach of such emission standards at a very early stage - and long before the manifestation of any adverse health effects in the population. Nonetheless for the sake of consistency with the requirements of the SEA Regulations this section includes objectives, indicators and targets for health.

### 4.3.3 SEOs, Indicator and Target

The following SEO, Indicator and Target have been developed for human health.

The impact of implementing the Plan on human health is influenced by the extent to which new development is accompanied by appropriate infrastructure - this relates to SEO M1 - and impacts upon the quality of water bodies - these relate to SEOs W1, W2, W3 and W4.

<b>SEO HH1:</b>	To protect human health from hazards or nuisances arising from exposure to incompatible landuses
<b>Indicator HH1i:</b>	Occurrence (any) of a spatially concentrated deterioration in human health
<b>Target HH1i:</b>	No spatial concentrations of health problems arising from environmental factors
<b>Indicator HH1ii:</b>	Number of non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health
<b>Target HH1ii:</b>	No non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health

## 4.4 Soil

### 4.4.1 Proposal for a Soil Framework Directive

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

Article 5 of the proposed Directive states that, for the purposes of preserving the various functions of soil; sealing, the development of artificial surfaces on top of soil resources, should be limited. The proposed Directive suggests that this may be achieved through rehabilitating brownfield sites, thus reducing the depletion of greenfield sites. The proposed Directive also states soil should be used in a sustainable manner which preserves its capacity to deliver ecological, economic and social services, while maintaining its functions so that future generations can meet their needs.

### 4.4.2 SEO, Indicator and Target

The following SEO, Indicator and Target have been developed with regard to the environmental baseline, the proposed Soil Directive and the land use strategic actions detailed under Section 4.3.1 *Population*.

<b>SEO S1:</b>	Maximise the sustainable re-use of brownfield lands, and maximise the use of the existing built environment rather than developing greenfield lands <sup>51</sup>
<b>Indicator S1:</b>	Area of brownfield land developed over the plan period
<b>Target S1:</b>	Reduced availability of brownfield land (subject to availability on the open market, the demand for such land and the ability for such lands to be sustainably re-used within the provisions of the Plan) at the end of the Plan's lifespan

Note: the impact of implementing the Plan on soil quality is influenced by impacts upon the quality of river and ground water bodies which relate to SEO W1 and W3.

## 4.5 Water

### 4.5.1 The Water Framework Directive 2000

#### 4.5.1.1 Introduction

Since 2000, Water Management in the EU has been directed by the Water Framework Directive 2000/60/EC (WFD). The WFD has been transposed into Irish legislation by the European Communities (Water Policy) Regulations 2003 (SI No. 722 of 2003). The WFD requires that all member states implement the necessary measures to prevent deterioration of the status of all waters - surface, ground, estuarine and coastal - and protect, enhance and restore all waters with the aim of achieving good status by 2015.

<sup>51</sup> SEO S1 was identified as conflicting with SEOs CH1 and CH2



#### 4.5.1.2 Good Status for Surface Waters

Good status as defined by the WFD equates to approximately Q4 in the national scheme of biological classification of rivers and mesotrophic in the trophic classification of lakes, as set out by the EPA.

#### 4.5.1.3 Good Status for Transitional Waters

Good status as defined by the Water Framework Directive can be attained by transitional waters through the achievement of *unpolluted* status in the Assessment of Trophic Status of Estuaries and Bays in Ireland (ATSEBI) System which is used by the EPA in order to classify the quality status of transitional waters.

#### 4.5.1.4 Quality Standards and Threshold Values for Ground Water

Detailed provisions to achieve the aims of the WFD for ground water have been presented in a Groundwater Daughter Directive (Directive 2006/118/EC on the protection of groundwater against pollution and deterioration).

This Directive sets up environmental objectives of good groundwater quantitative and chemical status, as well as ensuring a continuity to the 1980 Groundwater Directive (Directive 80/68/EEC on the protection of groundwater against pollution caused by dangerous substances) which is due to be repealed under the WFD by the end of 2013.

Article 3 of the 2006 Directive required that the assessment of the chemical status of groundwater use both quality standards identified in Annex I of the Directive and threshold values to be set by individual member states.

Groundwater quality standards are environmental quality standards expressed as the concentration of a particular pollutant, group of pollutants or indicator of pollution in groundwater, which should not be exceeded in order to protect human health and the environment. Annex I of the Directive sets standards for two pollutants: Nitrates - 50mg/l - and; Active substances in pesticides<sup>52</sup>, including their relevant metabolites, degradation and

<sup>52</sup> 'Pesticides' means plant protection products and biocidal products as defined in Article 2 of Directive 91/414/EEC and in Article 2 of Directive 98/8/EC, respectively.

reaction products - 0,1 µg/l and 0,5 µg/l (total<sup>53</sup>).

Irish groundwater threshold values<sup>54</sup> are currently in the process of being set by the EPA.

### 4.5.2 Bathing Water

EU Mandatory and Guide levels for bathing waters are set out in the 1976 Bathing Water Directive (76/160/EEC) as implemented into Irish law by the Quality of Bathing Water Regulations (SI No. 155 of 1992).

Mandatory Values are values which must be observed if the bathing area is to be deemed compliant with the Directive. Compliance with guide values exceeds guidance with mandatory values and can be regarded as quality objectives which bathing sites should endeavour to achieve.

A new Bathing Water Directive (2006/7/EC) - which entered into force in March 2008 - revises the 1976 Directive with the purpose of: preserving, protecting and improving the quality of the environment and protecting human health by complementing the Water Framework Directive (2000/60/EC). The 2006 Bathing Water Directive is implemented by the Bathing Water Quality Regulations 2008 (SI No. 79) of 2008.

### 4.5.3 Flooding

#### 4.5.3.1 Introduction

Certain areas within the Plan area are vulnerable to adverse effects from changes in the occurrence of severe rainfall events and associated flooding of surface water bodies combined with small changes in sea level.

<sup>53</sup> 'Total' means the sum of all individual pesticides detected and quantified in the monitoring procedure, including their relevant metabolites, degradation and reaction products.

<sup>54</sup> Threshold values are to be established by Member States for all pollutants and indicators of pollution which characterise groundwater bodies classified as being at risk of failing to achieve good groundwater chemical status under the WFD. Threshold values are required to be established in a way that, should the monitoring results at a representative monitoring point exceed the thresholds, this will indicate a risk that one or more of the conditions for good groundwater chemical status - with regard to the ability of groundwater to support human uses and with regard to waters used for the abstraction of drinking water - are not being met.

Flooding is an environmental phenomenon which, as well as having caused economic and social impacts, could in certain circumstances pose a risk to human health (see also SEO HH1).

The DEHLG's draft Planning Guidelines on the Planning System and Flood Risk Management have been considered in the drawing up of SEO W5 which relates to flooding.

European Directive 2007/60/EC on the assessment and management of flood risks aims to reduce and manage the risks that floods pose to human health, the environment, cultural heritage and economic activity. The Directive applies to inland waters as well as all coastal waters across the whole territory of the EU.

#### 4.5.3.2 EU Floods Directive

The Directive requires Member States to carry out a preliminary assessment by 2011 in order to identify the river basins and associated coastal areas at risk of flooding. For such zones flood risk maps are required to be drawn up by 2013. By 2015 flood risk management plans focused on prevention, protection and preparedness must be established by 2015.

The Directive is to be implemented in coordination with the Water Framework Directive and flood risk management plans and river basin management plans should be coordinated.

#### 4.5.4 SEOs, Indicators and Targets

The following SEOs, Indicators and Targets have been developed with regard to baseline for water and the objectives of the above strategic actions.

**SEO W1:** To maintain and improve, where possible, the quality of rivers and lakes

Indicator W1i: Biotic Quality Rating (Q Value)

Target W1ia: To maintain a biotic quality rating of Q4, in line with the requirement to achieve good water status under the Water Framework Directive, by 2015

Target W1ib: To improve biotic quality ratings, where possible, to Q5

Indicator W1ii: EPA Trophic Status of Lakes

Target W1iia: To achieve a minimum trophic status of mesotrophic, in line with the requirement to achieve good water status under the Water Framework Directive, by 2015

Target W1iib: To improve trophic status, where possible, to oligotrophic

**SEO W2:** To maintain and improve, where possible, the quality of transitional waters

Indicator W2: Trophic Status (ATSEBI)

Target W2: To maintain or to improve trophic status, where relevant, to unpolluted in line with the requirement to achieve good water status under the Water Framework Directive, by 2015

**SEO W3:** To prevent pollution and contamination of ground water

Indicator W3: Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC

Target W3: Compliance with Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC



<b>SEO W4:</b>	To prevent pollution and contamination of bathing water
Indicator W4:	Mandatory and Guide values as set by Directive (76/160/EEC)
Target W4:	To achieve - as a minimum - Mandatory values, and where possible to achieve Guide values as set by Directive (76/160/EEC)

<b>SEO W5:</b>	To prevent development on lands which pose - or are likely to pose in the future - a significant flood risk
Indicator W5:	Number of developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk
Target W5:	Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk

## 4.6 Air and Climatic Factors

### 4.6.1 Air Quality

The impact of implementing the Plan on air quality and noise are determined by the impacts which the Plan has upon the traffic levels which relate to SEO M2.

### 4.6.2 Climatic Factors

In order to reduce greenhouse gas emissions the internationally agreed Kyoto Protocol established emissions reduction targets for developing countries. Ireland's emission target for greenhouse gases is to limit the increase in their combined emissions during the five-year period 2008-2012 to 13 per cent above 1990 levels.

### 4.6.3 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. Traffic noise alone is harming today the

health (see SEO HH1) of almost one third of Europeans<sup>55</sup>.

The main health risks of noise identified by the WHO include: pain and hearing fatigue; hearing impairment; annoyance; interferences with social behaviour; interference with speech communication; sleep disturbance and all its consequences; and performance at work and school.

The Noise Directive - Directive 2002/49/EC relating to the assessment and management of environmental noise - is part of an EU strategy setting out to reduce the number of people affected by noise in the longer term and to provide a framework for developing existing Community policy on noise reduction from source.

The Directive requires competent authorities in Member States to:

- Draw up *strategic noise maps* for major roads, railways, airports and agglomerations, using harmonised noise indicators<sup>56</sup> and use these maps to assess the number of people which may be impacted upon as a result of excessive noise levels;
- Draw up action plans to reduce noise where necessary and maintain environmental noise quality where it is good; and,
- Inform and consult the public about noise exposure, its effects, and the measures considered to address noise.

The Directive does not set any limit value, nor does it prescribe the measures to be used in the action plans, which remain at the discretion of the competent authorities.

### 4.6.4 SEO, Indicator and Target

The following SEO, Indicator and Target have been developed with regard to the environmental baseline description and the objectives of the above strategic action.

<sup>55</sup> World Health Organization Regional Office for Europe (2003) *Technical meeting on exposure-response relationships of noise on health 19-21 September 2002* Bonn, Germany Bonn: WHO

<sup>56</sup> [ $L_{den}$  (day-evening-night equivalent level) and  $L_{night}$  (night equivalent level)]

<b>SEO A1:</b>	To minimise increases in travel related greenhouse emissions to air
Indicator A1i <sup>57</sup> :	Percentage of population within the Plan area travelling to work or school by public transport or non-mechanical means
Target A1i:	An increase in the percentage of the population travelling to work or school by public transport or non-mechanical means
Indicator A1ii <sup>58</sup> :	Average distance travelled to work or school by the population of the Plan area
Target A1ii:	A decrease in the average distance travelled to work or school by the population of the Plan area

traffic congestion. Traffic hotspots are located along the main road routes - especially at intersections - and provide for a harsh sensory environment which may impact upon human health.

It is noted that in addition to being addressed as part of this assessment traffic issues will also be addressed at the level of individual projects by the development management process and, for certain projects, by EIA.

### 4.7.3 SEOs, Indicators and Targets

The following SEOs, Indicators and Targets have been developed with regard to the environmental baseline and the objectives of the above strategic actions.

<b>SEO M1:</b>	To serve new development with appropriate waste water treatment
Indicator M1:	Number of new developments granted permission which cannot be adequately served by a public waste water treatment plant over the lifetime of the Plan
Target M1:	No new developments granted permission which cannot be adequately served by a public waste water treatment plant over the lifetime of the Plan

## 4.7 Material Assets

### 4.7.1 Waste Water

The treatment of wastewater is governed by the Urban Waste Water Treatment Directive (91/271/EEC) (amended by Directive 98/15/EEC) transposed into Irish law by the Urban Waste Water Treatment Regulations 2001 (SI 254 of 2001). The Directive aims to protect the environment from the adverse effects of the wastewater discharges by ensuring that wastewater is appropriately treated before it is discharged to the environment. The Regulations stipulate that sewage treatment facilities are in place in all towns by 2005.

Appropriate treatment is essential in order to meet the requirements of the Water Framework Directive (see Section 4.5.1).

### 4.7.2 Traffic

#### 4.7.2.1 Introduction

The occurrence of traffic congestion in Sligo Town together with new development means that it is likely that *traffic hotspots* within the Town are likely to at certain times have elevated levels of air pollution and noise levels due to

<sup>57</sup> As measured by the Central Statistics Office

<sup>58</sup> As measured by the Central Statistics Office



<b>SEO M2:</b>	To reduce car dependency within the Plan area by way of, inter alia, encouraging modal change from car to more sustainable forms of public transport and encouraging development which will not be dependent on private transport
The use of the SEO M2 provides a qualitative directional measure which is used to evaluate the effects of implementing the Plan.	

Department of the Environment, Heritage and Local Government under section 12 of the National Monuments (Amendment) Act, 1994.

Direct impacts on national monuments in State or Local Authority care or subject to a preservation order require the consent of the Minister for the Environment, Heritage and Local Government under Section 14 of the National Monuments Act 1930 as amended by Section 5 of the National Monuments (Amendment) Act 2004.

## 4.8 Cultural Heritage

### 4.8.1 Archaeological Heritage

#### 4.8.1.1 Valletta Convention 1992

The European Convention on Protection of the Archaeological Heritage known as the Valletta Convention of 1992. This was ratified by Ireland in 1997 and requires that appropriate consideration be given to archaeological issues at all stages of the planning and development process.

#### 4.8.1.2 National Heritage Plan for Ireland 2002

The core objective of the National Heritage Plan for Ireland 2002<sup>59</sup> is to protect Ireland's heritage. In this regard the 'polluter pays' principle and the precautionary principle are operable.

#### 4.8.1.3 National Monuments Acts

Archaeology in Ireland is protected under the National Monuments Acts 1930 to 2004.

Recorded monuments are protected by inclusion on the list and marked on the map which comprises the Record of Monuments and Places set out county by county under Section 12 of the National Monuments (Amendment) Act, 1994 by the Archaeological Survey of Ireland. The definition includes Zones of Archaeological Potential in towns and all other monuments of archaeological interest which have so far been identified.

Any works at or in relation to a recorded monument requires two months notice to the

<sup>59</sup> Department of Arts, Heritage, Gaeltacht and the Islands (2002) *National Heritage Plan for Ireland* Dublin: Government of Ireland

### 4.8.2 Architectural Heritage

#### 4.8.2.1 Planning and Development Act 2000

The Record of Protected Structures (RPS) included in the current Development Plan is legislated for under Section 51 of the Planning and Development Act 2000 and includes structures which form part of the architectural heritage and which are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest.

#### 4.8.2.2 Architectural Heritage and Historic Monuments Act 1999

The National Inventory of Architectural Heritage (NIAH) is a state initiative under the administration of the DEHLG which was established on a statutory basis under the provisions of the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999. Its purpose is to identify, record, and evaluate the post-1700 architectural heritage of Ireland, uniformly and consistently as an aid in the protection and conservation of the built heritage. It is intended that the NIAH provides the basis for the inclusion of particular structures in the RPS. All RPS entries are entries to the NIAH.

### 4.8.3 SEOs, Indicators and Targets

The following SEOs, Indicators and Targets have been developed with regard to the baseline for archaeology and the above strategic actions.

<b>SEO CH1:</b>	To protect the archaeological heritage of Sligo and Environs with regard to entries to the Record of Monuments and Places - including Zones of Archaeological Potential - and the context of the above within the surrounding landscape where relevant
<b>Indicator CH1:</b>	Number of unauthorised developments occurring which result in full or partial loss to entries to the Record of Monuments and Places - including Zones of Archaeological Potential - and the context of the above within the surrounding landscape where relevant
<b>Target CH1:</b>	No unauthorised developments occurring which result in full or partial loss to entries to the Record of Monuments and Places - including Zones of Archaeological Potential - and the context of the above within the surrounding landscape where relevant

<b>SEO CH2:</b>	To preserve and protect the special interest and character of Sligo and Environs architectural heritage with regard to entries to the Record of Protected Structures and their context within the surrounding landscape where relevant
<b>Indicator CH2i:</b>	Number of unauthorised developments occurring which result in physical loss or loss entries to the Record of Protected Structures and/or their context within the surrounding landscape where relevant
<b>Indicator CH2ii:</b>	Number of additions to the Record of Protected Structures and the number of additional ACAs
<b>Target CH2i:</b>	No unauthorised developments occurring which result in physical loss or loss entries to the Record of Protected Structures and/or their context within the surrounding landscape where relevant
<b>Target CH2ii:</b>	Make Additions to the Record of Protected Structures and make additional ACAs, where appropriate

## 4.9 Landscape

### 4.9.1 European Landscape Convention 2000

Ireland signed and ratified the European Landscape Convention (2000) in 2002 with the Convention entering into force in Ireland in 2004. The aims of the Convention include: to conserve and maintain the significant or characteristic features of a landscape, justified by its heritage value derived from its natural configuration and/or from human activity; to harmonise changes in the landscape which are brought about by social, economic and environmental processes, and to enhance landscapes.



#### 4.9.2 SEO, Indicator and Target

The following SEO, Indicator and Target have been developed with regard to the environmental baseline and the above strategic action.

<b>SEO L1:</b>	To avoid significant adverse impacts on the landscape, especially with regard to landscapes which are most valuable and most sensitive to change and protected views and routes
<b>Indicator L1:</b>	Number of complaints received from statutory consultees regarding avoidable impacts resulting from development which is granted permission under the Plan
<b>Target L1:</b>	No developments permitted which result in avoidable impacts on the Town and Environs' sensitive landscapes

## Section 5 Context for a Development Plan for Sligo and Environs

### 5.1 Introduction

Under Section 9 of the Planning and Development Act 2000, every planning authority must make a development plan, setting the framework for all future development in the planning authority's area for the stated period, for the whole functional area of the authority every six years. The plan is required to set out an overall strategy for the proper planning and sustainable development of the area in question.

It is in this context in which the Sligo and Environs Development Plan 2010-2016 (SEDP) sets out a strategy for the proper planning and sustainable development of the Gateway City of Sligo, consisting of Sligo Borough area and the Town's environs, lying under the jurisdiction of Sligo County Council.

The Plan, which is jointly prepared by Sligo Borough and County Councils, builds on the review of the SEDP 2004-2010, taking into account recent key development trends and national, regional and local policy developments.

The Plan presents Sligo Local Authorities' strategic outlook for the long-term development of the Gateway City of Sligo, although its legal life covers only the period 2010-2016. The strategic framework of the Plan is based on a vision for Sligo, which outlines the growth of a compact, accessible, green, creative and enterprising Town for the people.

### 5.2 Structure and Content

The Plan consists of seven separate documents as follows:

1. Main written statement;
2. Joint Sligo City and County Housing Strategy 2010-2017;
3. Joint Sligo City and County Retail Strategy 2010-2017;
4. North Fringe Local Area Plan 2010-2016;
5. Quay Quarter Urban Design Framework;
6. Record of Protected Structures (RPS); and,

7. SEA Environmental Report (this document).

The following policy documents are retained as part of the Plan without any modifications:

- Centre Block Masterplan; and,
- Courthouse Block Urban Design Framework.

### 5.3 Overall Vision of the Plan

The *Overall Sligo Gateway Vision* of the Plan, which shapes the policies and objectives, is as follows:

#### A Compact City

- enhancement of the urban core through the promotion of higher-density, mixed-use developments capable of expanding on existing city centre qualities, especially the historic urban fabric with key buildings of architectural value; civic, cultural and religious institutions; public squares and market places, pedestrian links and riverside walks;
- consolidation of existing residential and mixed-use areas through appropriate replacements or infill development and enhancement/provision of essential retail, community and recreation facilities within neighbourhood centres and open-space areas;
- regeneration of areas such as Cranmore and the Docklands, through comprehensive, masterplan-based redevelopment with a view to provide high-quality living, working and leisure space;
- plan-led, phased expansion of the city towards the east at Ballinode-Hazelwood; towards the north at Lisnalgur-Rathbraghan-Shannon Oughter; and towards the south-west at Caltragh-Carrowroe

#### A Liveable City

- creation of a safe, attractive urban environment where residents and visitors can enjoy the historical inheritance, the high-quality design of



new buildings and the well-maintained public spaces; artists and traders can give new life to old and new market places; movement is easy and well-managed.

#### An Accessible City

- offering not only a range of transport options, but also access to affordable homes, healthcare, educational, cultural and recreational facilities, as well as easy access to the exquisite natural environment and archaeological heritage surrounding the city.

#### A Green City

- making efficient use of natural resources, respecting the natural environment, conserving energy, minimising noxious waste and emissions, maximising the usage of urban open space and encouraging eco-friendly design and construction methods.

#### An Enterprising City

- supporting entrepreneurship and innovation, and providing a skilled work force to business and industry and ensuring that the spatial strategy and physical infrastructure are conducive to economic growth.

#### A Creative City

- celebrating the unique heritage, promoting the creative industries and the arts, striving to make culture a growth driver, a catalyst for urban regeneration and a tourist attractor.

## 5.4 Alternatives

Sections 6 and 7 of this report identify, describe and evaluate different alternative scenarios for the future development of the Plan area, taking into account the relevant land use strategic actions (see Section 5.5), the SEOs identified in Section 4 as well as the geographical scope of the Plan boundary.

The evaluation of the alternatives results in the identification of potential impacts and leads to the emergence of a preferred alternative for the Plan.

## 5.5 Interactions with Relevant Planning Policy

### 5.5.1 Introduction

The Plan is nested in a hierarchy of land use forward planning strategic actions with which it must comply and be consistent.

### 5.5.2 National Development Plan 2007-2013

The National Development Plan 2007-2013 (NDP) envisages a total investment of €184 billion over 7 years to 'secure the further transformation of our country socially and economically within an environmentally sustainable framework'.

The need for a National Spatial Strategy was formally recognised by the Government with the publication of the 2000-2006 NDP.

The 2007-2013 NDP aims to promote the development of all regions in Ireland within a co-ordinated, coherent and mutually beneficial framework. Balanced regional development is, accordingly, central to the investment strategy of the Plan. The NDP also mentions Sligo as part of the envisaged Atlantic Gateways Corridor. The NDP aims to implement the promotion of regional development through:

- A major programme of investment under the Plan in infrastructure with a particular focus on addressing deficits in the various National Spatial Strategy Gateway areas;
- Implementation of integrated spatial planning frameworks at Gateway/Regional Authority level which will address appropriate land use at regional and Gateway levels; and facilitate and complement the Plan investment in infrastructure;
- Investment in Enterprise and Human Capital development of the Regions, including rural areas; and,
- The establishment, initially for the period 2008-2010, of a Gateway Innovation Fund on a competitive basis and as a mechanism to bring about better co-ordination in Gateway

development supporting distinctive and innovative projects in Gateway areas which are contributing to the development of the Gateways and their wider regions. This initiative aims at stimulating the growth of the nine gateways identified under the NSS.

The NDP summarises the objectives of these interventions as:

- Ensuring that each Gateway region maximises its potential for economic and social development;
- Achieving a better balance between the regions in terms of economic and social development; and,
- Fostering enhanced co-ordination in the development of the Gateways and their regions and between planning and investment at local, regional and national levels.

### **5.5.3 National Spatial Strategy 2000-2020**

The National Spatial Strategy 2000-2020 (NSS) is a twenty year plan for the country which aims to promote a better balance of population, jobs and development between the regions.

The NSS identifies Sligo as an urban centre to be developed in an accelerated manner as a Gateway City to drive the overall development of the North-West. Drawing from Sligo Subregional Strategy 2001-2021, the current SEDP 2004-2010 has set out the for the first time a growth framework for Sligo Town. The SEDP 2010-2016 refines and consolidates this framework.

In order to promote sustainable development and allow for the public transport system to function more effectively - as promoted by the NSS - it is essential to consolidate the physical growth of Sligo and Environs. This can be achieved through the development of greenfield lands and vacant, derelict and underutilised lands, in particular where they are in close proximity to public transport routes.

### **5.5.4 Regional Planning Guidelines for the Border Region 2004-2024**

Ireland is divided into eight regional forward planning regions, Dublin, Midlands, Mid East, Mid West, South East, South West, West and Border, each with its own regional planning authority composed of Elected Members selected by the constituent local government councils. Regional planning authorities are required, under the Planning and Development (Regional Planning Guidelines) Regulations 2003 (SI No. 175 of 2003), to draw up regional planning guidelines (RPGs), long term strategic planning frameworks, for their relevant region. RPGs must have regard to the National Spatial Strategy.

Sligo is located within the Border Regional Planning Authority area for which the Regional Planning Guidelines for the Border Region 2004-2024 have been prepared.

The RPGs provide a long term planning framework for the development of the Border Region. The principal objective of the RPGs is to put in place a broad planning framework for the region and to provide an overall long term strategy for the making of Development and Local Area Plans for each local authority in the region.

The RPGs seek to promote the growth of the NSS-identified gateways within a regional structure that also supports the development of other key settlements in the Border Region and the diversification of rural areas.

### **5.5.5 Sligo County Development Plan 2005-2011**

The Sligo County Development Plan (CDP) 2005-2011 responds to the call in the NSS for frameworks at county level designed to achieve balanced development in areas outside the gateways.

The CDP establishes a hierarchical settlement structure and outlines the growth potential of key settlements, outside the Gateway. The CDP is also a tool for managing urban and rural development in the areas directly influenced by Sligo City.



## **5.6 Environmental Protection Objectives**

The Development Plan is subject to a number of high level national, international and regional environmental protection policies and objectives, including those which have been identified as Strategic Environmental Objectives in Section 4.

Examples of Environmental Protection Objectives include the aim of the EU Habitats Directive - which is to contribute towards ensuring bio-diversity through the conservation of natural habitats and of wild fauna and flora in the European territory of Member States - and the purpose of the Water Framework Directive - which is to establish a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwater.

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

## Section 6 Description of Alternative Plan Scenarios

### 6.1 Introduction

One of the critical roles of the SEA is to facilitate an evaluation of the likely environmental consequences of a range of alternative strategies for accommodating future development in Sligo and Environs.

These alternative strategies must be realistic, capable of implementation, and should represent a range of different approaches within statutory and operational requirements of the particular plan. In some cases the preferred strategy will combine elements from the various alternatives considered.

This section identifies and describes different plan scenarios, taking into account higher level strategic actions as well as the geographical scope of the town and the extent of its Environs.

The alternative scenarios are evaluated in Section 7 resulting in the identification of potential impacts and informing the selection of a preferred alternative for the Development Plan. The policies and objectives which are required to realise the preferred alternative are evaluated in Section 8.

Mitigation measures which attempt to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the preferred alternative are recommended for inclusion in Section 9.

### 6.2 Excluding the 'Do-Nothing' Scenario

As the current Development Plan is required to be reviewed and replaced by a new Development Plan under legislation a 'do-nothing' alternative is not considered, nor is it required to be by the SEA Directive.

It is noted that Annex I of the SEA Directive specifies that information should be provided in the environmental report on *inter alia* 'the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme'. Section 3 identifies the evolution of

each component of the environment in the absence of implementing the Development Plan.

### 6.3 Note on Transport components of alternative scenarios

With regard to the transport components of each of the scenarios it is noted that:

- The provision of a number of grade separated junctions along the N4 Sligo Inner Relief Road may help alleviate traffic congestion in the city centre but would not eliminate the need to bypass the city.
- Three alternative routes have been examined for the Bypass, all involving crossing the SPA. This is the planning stage and it is too early to consider design strategies. All design strategies will be considered at design stage, including ecological considerations and the effect on habitats.
- The Western Bypass is part of the Atlantic Corridor, a strategic route, which is a specific project to be delivered under the current NDP and Transport 21.

### 6.4 Description of Alternative Scenarios

#### 6.4.1 Introduction

The following summarises a series of 'Scenarios' which provide alternative visions of how the future development of Sligo and Environs might occur. These are neither predictions nor preferences - instead they offer a range of plausible and internally consistent narratives of the outcome of different planning and development strategies. These provide the basis for the comparative evaluation of the likely environmental effects of each plan, which in turn serves the purpose of identifying which features of plans and policies are likely to be



sensitive or robust over the widest range of circumstances.

#### **6.4.2 Alternative Scenario 1: *Doughnut City***

Scenario 1 (see Figure 6.1) is based upon development occurring in a doughnut-shaped pattern, adjoining the existing development limit on its outside.

Already zoned lands that surround the existing built-up area of Sligo Town would remain largely undeveloped under this scenario.

The availability of newer, more affordable residential development in a rural setting - which seems to be preferred by many Sligo Town and County residents - would lead to the hollowing-out of the Town.

The scenario is strongly informed by the land zoning requests received in submissions made at the pre-draft stage of the Sligo and Environs Development Plan review process. These submissions, coming mainly from landowners, request residential and/or mixed-use zoning.

##### **Transport component of this scenario:**

- A new ring road would be required around the city to service the development areas, which would involve crossing the SPA west of the city and the SAC south east of the city. The ring road would predominantly serve local traffic and would help to alleviate traffic congestion in the city centre.
- The Western Bypass would be necessary in the longer term to cater for traffic bypassing the city as development progressed in the doughnut.

#### **6.4.3 Alternative Scenario 2: *Horseshoe City***

The practical experience of planners in Sligo Local Authorities indicates that, if development were not controlled, there would be a preference for low-density residential development outside Sligo and Environs.

This is particularly the case for areas located to the west and north-west of the Town along the

Strandhill Road and Rosses Point Road (including Ballincar), where a notable amount of ribbon development has occurred.

The demand for housing in these areas is based on the convenient location between the Town and the seaside settlements of Strandhill and Rosses Point.

It appears that views of Sligo Bay, Knocknarea, Benbulbin, and also the attraction of living close to the water and not far from town make these locations highly desirable in residential terms.

The Horseshoe City scenario (see Figure 6.2) is based on the intensification of existing uses and further development along the regional roads around Sligo Bay.

##### **Transport component of this scenario:**

- The existing road network would not be adequate to service development in this scenario. A crossing of the SPA would be necessary in the short term. Even with the crossing, this would result in severe congestion of the city centre. This would increase the need for the Western Bypass in the shorter term.

#### **6.4.4 Alternative Scenario 3 *Compact City***

Scenario 3 (see Figure 6.3) is based upon achieving a balance between the consolidation / regeneration of the existing built-up area and the planned expansion of the City into the Environs.

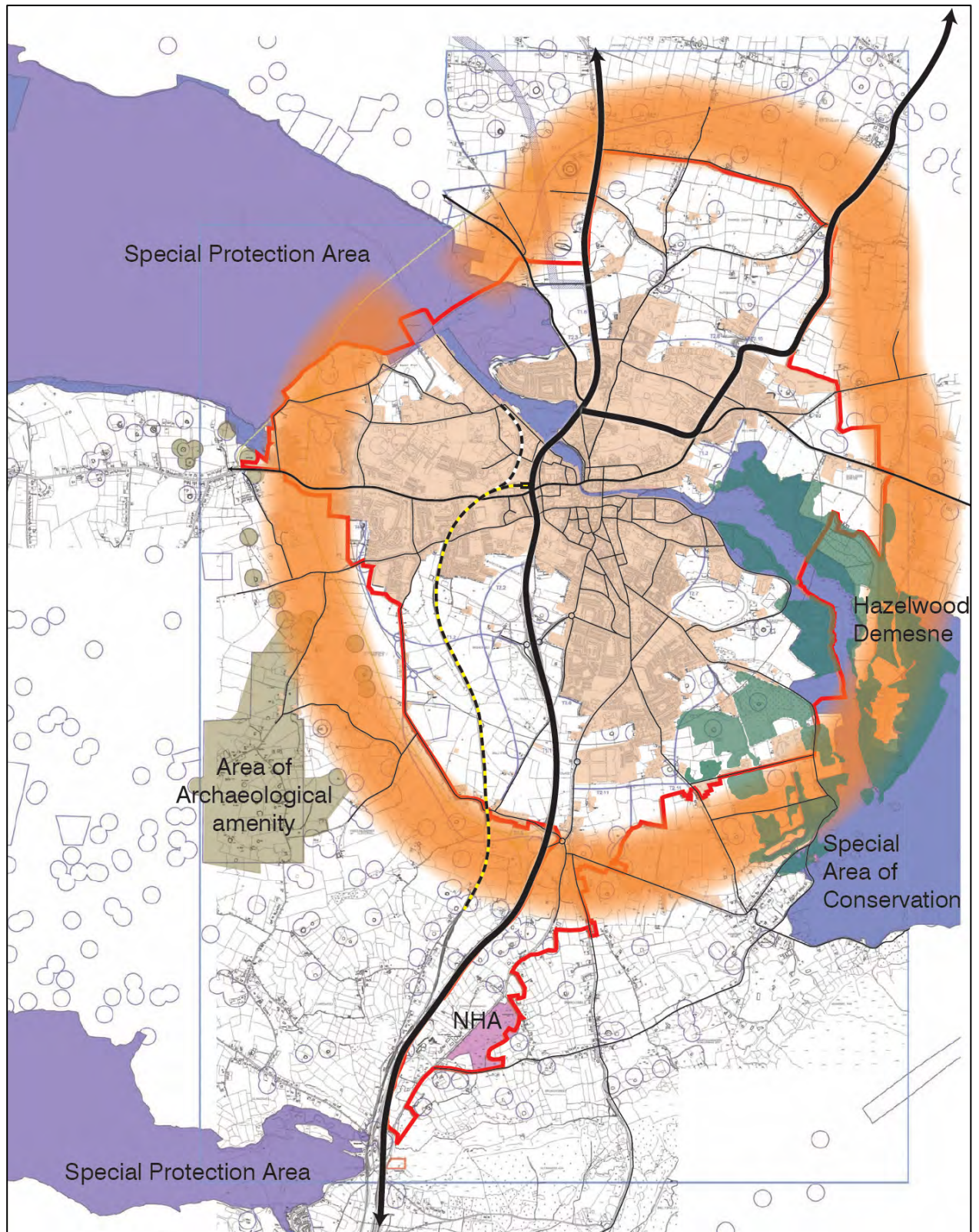
The scenario identifies five areas:

- Two areas - Sligo Docklands and Cranmore-Cleveragh - would be subject to comprehensive consolidation / regeneration.
- Teesan-Lisnallurg (the "North Fringe" area) and the south-western quadrant at Caltragh-Carrowroe are identified for the planned expansion of the City.
- To the east of the City, the Hazelwood-Ballinode area, for which a Local Area Plan is already in place, would be subject to a combination of consolidation (at Ballinode) and planned expansion to the east.

**Transport component of this scenario:**

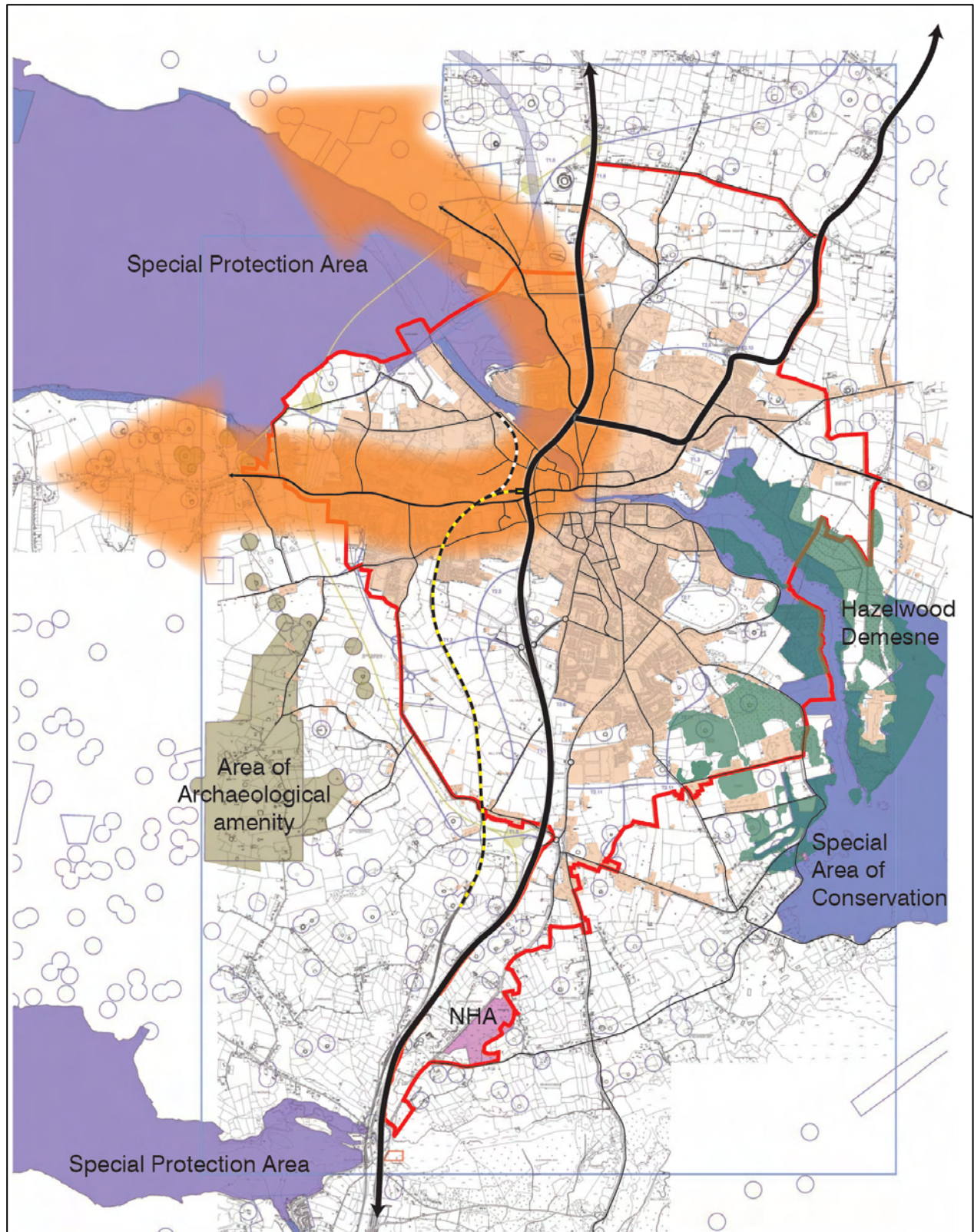
- This scenario includes a route selection corridor for a future Western By-Pass as well as provisions for the crossing of the Garavogue River to the east of the City.
- In order to reduce traffic crossing the river, thus reducing congestion in the city centre, commercial activities that require vehicular traffic need to be facilitated in the North East (North Fringe) and South of the City.
- The Western Bypass would be necessary in the medium term to cater for traffic bypassing the city.





**Figure 6.1 Alternative Scenario 1: Doughnut City**





**Figure 6.2 Alternative Scenario 2: Horseshoe City**



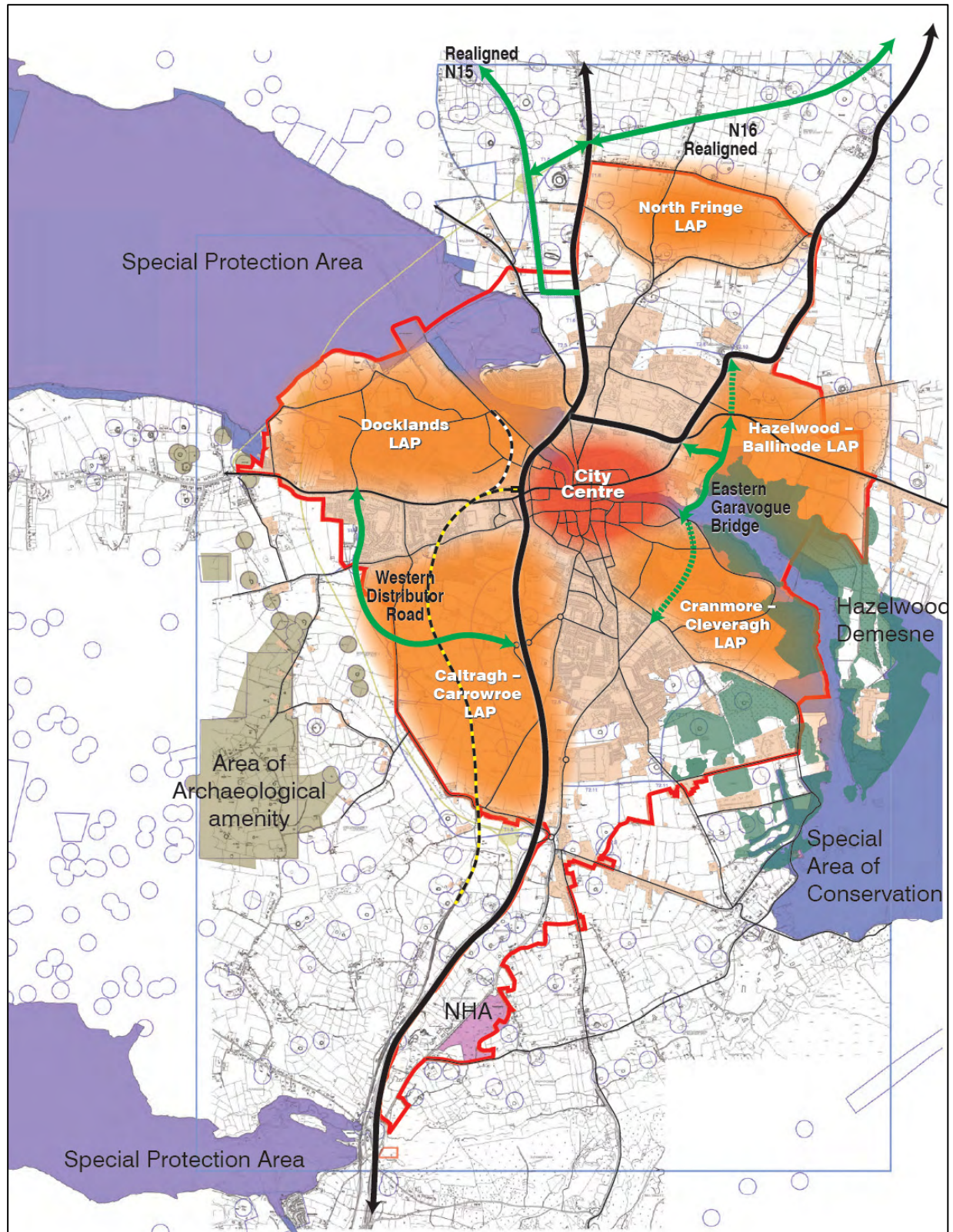


Figure 6.3 Alternative Scenario 3: Compact City

## Section 7 Evaluation of Alternative Plan Scenarios

### 7.1 Introduction

The objective of this section is to determine the relative merits of a range of the alternative scenarios for the future development of Sligo and Environs. This determination sought to understand whether each alternative was likely to improve, conflict with or have a neutral interaction with the environment.

Scenarios are evaluated in a succinct and focused way for both planning and environmental impacts against both the existing environment and the Strategic Environmental Objectives (SEOs).

In order to comply with the SEA Directive Strategic Environmental Objectives have been grouped under relevant parent components such as *water* and *landscape*.

### 7.2 Methodology

#### 7.2.1 Existing Environment

In order to identify the extent to which environmental sensitivities are likely to be impacted upon by implementation of the Plan, use has been made of the description of the environmental baseline, including the maps which spatially represent components of the environmental baseline, provided within Section 3.

#### 7.2.2 Strategic Environmental Objectives (SEOs)

Based on an understanding of the existing and emerging environmental conditions in the Town and Environs, a series of SEOs were developed in order to assess the likely environmental effects which would be caused by implementation of each of the four alternative scenarios described in Section 6. The alternatives are evaluated using compatibility criteria (see Table 7.1) in order to determine how they are likely to affect the status of these SEOs.

Table 7.2 brings together all the SEOs which have been developed from international, national and regional policies which generally govern environmental protection objectives.

The SEOs and the alternative scenarios are arrayed against each other to identify which interactions - if any - would cause impacts on specific components of the environment.

Where the appraisal identifies a likely conflict with the status of an SEO the relevant SEO code is entered into the conflict column - e.g. B1 which stands for SEO likely to be affected - in this instance *'to avoid loss of relevant habitats, geological features, species or their sustaining resources in designated ecological sites'*.

#### 7.2.3 Note on effects of Transport components of alternative scenarios

Potential impacts posed in the future in the Sligo and Environs area by any transport development on designated ecology would have to be mitigated.

To progress any City Bypass project or any road project which involves crossing a Natura 2000 site it will be necessary to:-

- Demonstrate the need for the project in light of a do nothing context;
- Examine the potential for intensifying/upgrading existing roads and routes;
- Develop a comprehensive series of plausible alternative routes and design strategies (the latter to include long span and tunnel options);
- Demonstrate that all routes take due account of, and accommodate, ecological considerations and legislative requirements; and,
- Demonstrate that there will be no incursions onto or adverse effects on these habitats.



Likely to  
**Improve** status  
of SEOs

Probable  
**Conflict** with  
status of SEOs-  
unlikely to be  
mitigated

Potential  
**Conflict** with  
status of SEOs-  
likely to be  
mitigated

**Uncertain**  
interaction with  
status of SEOs

**Neutral**  
Interaction with  
status of SEOs

**No Likely**  
interaction with  
status of SEOs

**Table 7.1 Criteria for appraising the effect of Plan provisions on Strategic Environmental Objectives**

SEO Code	SEO
<b>B1</b>	To avoid loss of relevant habitats, geological features, species or their sustaining resources in designated ecological sites
<b>B2</b>	To avoid significant adverse impacts, including direct, cumulative and indirect impacts, to relevant habitats, geological features, species or their sustaining resources in designated ecological sites by development within or adjacent to these sites
<b>B3</b>	To sustain, enhance or - where relevant - prevent the loss of ecological networks or parts thereof which provide significant connectivity between areas of local biodiversity
<b>HH1</b>	To protect human health from hazards or nuisances arising from exposure to incompatible landuses
<b>S1</b>	Maximise the sustainable re-use of brownfield lands, and maximise the use of the existing built environment rather than developing greenfield lands <sup>60</sup>
<b>W1</b>	To maintain and improve, where possible, the quality of rivers and lakes
<b>W2</b>	To maintain and improve, where possible, the quality of transitional waters
<b>W3</b>	To prevent pollution and contamination of ground water
<b>W4</b>	To prevent pollution and contamination of bathing water
<b>W5</b>	To prevent development on lands which pose - or are likely to pose in the future - a significant flood risk
<b>A1</b>	To minimise increases in travel related greenhouse emissions to air
<b>M1</b>	To serve new development with appropriate waste water treatment
<b>M2</b>	To reduce car dependency within the Plan area by way of, inter alia, encouraging modal change from car to more sustainable forms of public transport and encouraging development which will not be dependent on private transport
<b>CH1</b>	To protect the archaeological heritage of Sligo and Environs with regard to entries to the Record of Monuments and Places - including Zones of Archaeological Potential - and the context of the above within the surrounding landscape where relevant
<b>CH2</b>	To preserve and protect the special interest and character of Sligo and Environs architectural heritage with regard to entries to the Record of Protected Structures and their context within the surrounding landscape where relevant
<b>L1</b>	To avoid significant adverse impacts on the landscape, especially with regard to landscapes which are most valuable and most sensitive to change and protected views and routes

**Table 7.2 Strategic Environmental Objectives (SEOs)<sup>61</sup>**

<sup>60</sup> SEO S1 was identified as conflicting with SEOs CH1 and CH2

<sup>61</sup> Strategic Environmental Objectives (SEOs) are methodological measures which are developed from international, national, regional and County policies which generally govern environmental protection objectives and against which the environmental effects of the Draft Plan can be tested. The SEOs are used as standards against which the development strategies, policies and objectives of the Draft Plan can be evaluated in order to help identify areas in which significant adverse impacts are likely to occur, if unmitigated against.

## 7.3 Evaluation of Alternative Scenario 1: *Doughnut City*<sup>62</sup>

### 7.3.1 Environmental Effects

- **Brownfield vs. Greenfield Development**

This scenario would conflict with any attempts to maximise brownfield development<sup>63</sup>.

- **Designated Ecology, Ecological Connectivity and Non-Designated Ecology**

By providing for significant levels of greenfield development outside of the existing development envelope this scenario would enable the replacement of semi natural surfaces with artificial surfaces thereby resulting in losses to non-designated ecology and ecological connectivity<sup>64</sup>. As with each of the 3 scenarios, potential impacts posed by any transport development on designated ecology<sup>65</sup> would have to be mitigated.

- **Waste Water Treatment, Water Quality and Human Health**

As low density development on unserviced lands is provided for by this scenario, the provision of waste water collection infrastructure<sup>66</sup> would not be economically viable in all cases and would be likely to conflict with the protection of water quality<sup>67</sup> (the waters of Lough Gill and the Garavogue Estuary are *at significant risk* with regard to meeting the objectives of the Water Framework Directive, while Groundwaters stored in limestone

aquifers beneath the Plan area are *probably at significant risk*).

- **Flooding**

The replacement of semi natural surfaces with artificial surfaces would be likely to significantly increase levels of run-off, especially during periods of heavy rainfall, and would be likely to increase the likelihood of flooding<sup>68</sup> and resultant risks posed to human health<sup>69</sup> and material assets.

- **Greenhouse Gases and Car Dependency**

The low densities of development over wider areas of land provided for this scenario would make public transport unviable - this would result in increases in journey times, journey distances, car dependency and greenhouse gas emissions<sup>70</sup>.

- **Archaeological Heritage**

Archaeological heritage would also be likely to be significantly and adversely impacted upon - due to both infringements upon monuments and the obstruction of visibility between monuments, and between monuments and Knocknarea and Carrowmore<sup>71</sup>.

- **Architectural Heritage**

By providing for development occurring in a doughnut-shaped pattern, adjoining the existing development limit on its outside short term protection of the architectural heritage<sup>72</sup> located in the built up area of the town would be achieved. Conversely, the favouring of rural, greenfield development over urban, brownfield development would lead to a decline in the long term protection of this heritage - there would be a lack of urban regeneration and urban decay would result.

<sup>62</sup> Footnotes like this are used in this section in order to identify instances where interactions between the relevant Scenario and the relevant SEOs occur. The nature of these interactions are identified on Table 7.3.

<sup>63</sup> SEO S1

<sup>64</sup> SEO B3

<sup>65</sup> SEOs B1 B2

<sup>66</sup> SEO M1

<sup>67</sup> SEOs W1 W2 W3 W4

<sup>68</sup> SEO W5

<sup>69</sup> SEO HH1

<sup>70</sup> SEOs A1 M2

<sup>71</sup> SEO CH1

<sup>72</sup> SEO CH2



- **Landscape**

Low density, greenfield development would be likely to cumulatively, significantly adversely effect the landscape in the sensitivity areas to the east and south of the town<sup>73</sup>.

### 7.3.2 Planning Effects

Advantages:

- The principal advantage of this scenario lies in the availability of land that would be easily accessed and assembled. An increased supply of land zoned residential may make housing more affordable.

The disadvantages, on the other hand, are numerous and significant:

- These outer-lying areas are generally not serviced; their zoning would lead to the uneconomic demand for the provision of physical infrastructure such as water, sewerage, roads etc., at a significant distance from such existing services.
- Social infrastructure and community facilities are also generally absent in these areas.
- The provision of public transport facilities would be more difficult, possibly nonviable. This would increase dependence on private cars for transportation, leading to traffic congestion and additional burdens on road infrastructure.
- Development would occur within or closer to areas/landscapes that are vulnerable in terms of visual amenity (e.g. Lough Gill) and archaeological significance (e.g. Carrowmore, Cairns Hill). This may have a negative effect on the amenity of these areas.
- Development would occur within or closer to areas that are vulnerable in terms of impact on water supplies and designated nature conservation sites (Lough Gill / Garavogue River). This

may damage the environmental quality of these areas.

- Development in these outer-lying areas would have a negative impact on the vitality and viability of the existing City Centre, and will not encourage the regeneration of existing inner-city communities.
- Development in an outer ring may eventually become an obstruction to the future provision of major infrastructure.

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<sup>73</sup> SEO L1

## 7.4 Evaluation of Alternative Scenario 2: *Horseshoe City*

### 7.4.1 Environmental Effects

- **Brownfield vs. Greenfield Development**

Scenario 2 *Horseshoe City* would conflict with any attempts to maximise brownfield development<sup>74</sup>.

- **Designated Ecology, Ecological Connectivity and Non-Designated Ecology**

The significant levels of greenfield development at lands adjacent to Cummeen Strand/Drumcliff Bay SPA, SAC and pNHA provided for by this scenario would be likely to cumulatively adversely effect designated ecology, non-designated ecology and ecological connectivity<sup>75</sup>. As with each of the 3 scenarios, potential impacts posed by any transport development on designated ecology<sup>76</sup> would have to be mitigated.

- **Human Health**

This scenario could enable greenfield development to occur in designated safety zones thereby hindering the protection of flight paths and potentially adversely effecting human health<sup>77</sup>.

- **Waste Water Treatment, Water Quality and Human Health**

Development provided for by Scenario 2 would be likely to be *generally* serviced by adequate waste water collection and treatment infrastructure<sup>78</sup> as this infrastructure *generally* exists or is proposed to be provided for the relevant development areas. The protection of

the quality of the water bodies<sup>79</sup> within and surrounding Sligo Town is dependent upon - among other things - the provision of adequate waste water collection and treatment infrastructure.

- **Flooding**

Greenfield development adjacent to Sligo Bay provided for by this scenario would be at a heightened flood risk<sup>80</sup>, especially where rises were experienced in sea level in the future. Instances of coastal flooding would be likely to pose risks to human health<sup>81</sup> and material assets.

- **Greenhouse Gases and Car Dependency**

The low densities of development provided for this scenario would make public transport unviable - this would result in increases in journey times, journey distances, car dependency and greenhouse gas emissions<sup>82</sup>.

- **Archaeological Heritage**

Impacts on both known monuments - due to infringements - and unknown archaeological heritage - due to construction and demolition - could occur as a result of individual projects<sup>83</sup>.

- **Architectural Heritage**

By providing for further low density greenfield development along the regional roads along Sligo Bay, short term protection of the architectural heritage<sup>84</sup> located in the built up area of the town would be achieved. Conversely, the favouring of greenfield development over urban, brownfield would lead to a decline in the long term protection of this heritage - there would be a lack of urban regeneration and urban decay would result.

<sup>74</sup> SEO S1

<sup>75</sup> SEOs B1 B2 B3

<sup>76</sup> SEOs B1 B2

<sup>77</sup> SEO HH1

<sup>78</sup> SEO M1

<sup>79</sup> SEOs W1 W2 W3 W4

<sup>80</sup> SEO W5

<sup>81</sup> SEO HH1

<sup>82</sup> SEOs A1 M2

<sup>83</sup> SEO CH1

<sup>84</sup> SEO CH2



- **Landscape**

By providing for significant additional ribbon development along lands adjacent to Sligo Bay, Scenario 2 would be likely to cumulatively, significantly adversely effect this sensitive landscape and seascape<sup>85</sup>.

## 7.4.2 Planning Effects

### Advantages:

- This scenario responds to popular residential demand and, accordingly, there is likely to be strong interest from developers. The attractive setting contributes substantially to the perceived good quality of living.
- Land is plentiful, available, easy to access and assemble. An increased supply of land may make housing more affordable.
- It suggests the possibility of rail-based public transport (tram line from Strandhill through Sligo to Rosses Point).
- Concentrating development to the west of Sligo City may eliminate the need for an eastern river-crossing. Conversely, if an eastern crossing is deemed necessary, the absence of new development to the east of the City may result in less obstruction to the provision of such infrastructure.
- Generally, wastewater infrastructure already exists or is proposed to be provided to serve this area.

### Disadvantages:

- The Horseshoe City scenario represents an unbalanced approach to the development of Sligo City and Environs area. Concentrating development in a linear pattern around Sligo Bay would have a negative impact on the vitality and viability of the existing City Centre, and might lead to the neglect of existing communities in need of regeneration,

particularly on the eastern side of the City.

- Social infrastructure and community facilities are non-existent in large portions of these areas.
- In the absence of sufficient population to sustain a tram or bus service with an adequate frequency, the envisaged lower-density development would generate more dependence on private cars for transportation, leading to increased traffic congestion and burden on road infrastructure.
- Development would occur within or closer to areas or landscapes that are vulnerable in terms of visual amenity (i.e. the coastline around Sligo Bay).
- Development would occur within or closer to areas that are vulnerable in terms of impact on designated nature conservation sites (Cummeen Strand/Sligo Bay).
- Growth of the city outwards along the Strandhill Road may have an adverse impact on the operation of Strandhill Airport, which requires designated safety zones and the protection of flight paths.
- The existing villages (e.g. Ballincar) would lose their identity in a mass of development stretching from the City outwards, eventually reaching and amalgamating Strandhill and Rosses Point into a single urban continuum.

## 7.5 Evaluation of Alternative Scenario 3: *Compact City*

### 7.5.1 Environmental Effects

- **Brownfield vs. Greenfield Development**

This scenario will contribute to the maximisation of brownfield development<sup>86</sup> by providing for the consolidation / regeneration of the existing built-up area, as well as the

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<sup>85</sup> SEO L1

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<sup>86</sup> SEO S1

planned expansion of the existing development envelope into the Environs.

- **Designated Ecology, Ecological Connectivity and Non-Designated Ecology**

By providing for significant levels of brownfield development within the existing development envelope, this scenario would contribute to avoiding impacts upon ecology - both designated and non-designated - and ecological connectivity<sup>87</sup> which might otherwise take place as a result of higher levels of greenfield development.

If unmitigated, regeneration projects which would be permitted under this Scenario through a future Docklands Local Area Plan could adversely affect water quality in the Bay by releasing contaminants and/or pollutants. Any changes in water quality could impact upon designated ecology.

As with each of the 3 scenarios, potential impacts posed by any transport development on designated ecology<sup>88</sup> would have to be mitigated.

- **Human Health**

If unmitigated, regeneration projects which would be permitted under this Scenario through a future Docklands Local Area Plan could adversely affect: water quality in the Bay by releasing contaminants and/or pollutants; and/or air quality in the vicinity of the Docklands as a result of odours and dust. Any changes in air quality or water quality could impact upon human health<sup>89</sup>.

- **Waste Water Treatment, Water Quality and Human Health**

Due to the compact nature and extent of development provided for by this scenario, new developments would be likely to be served by adequate waste water collection and treatment

infrastructure<sup>90</sup>. Consequently, impacts of new developments upon water quality<sup>91</sup> and human health as a result of inappropriately treated waste water would be reduced.

If unmitigated, regeneration projects which would be permitted under this Scenario through a future Docklands Local Area Plan could adversely affect water quality in the Bay by releasing contaminants and/or pollutants.

- **Flooding**

This scenario provides for an amount of greenfield development. Greenfield development would involve the replacement of semi natural surfaces with artificial surfaces and would be likely to significantly increase levels of run-off, especially during periods of heavy rainfall. Applications under this scenario would have to be very carefully considered in order to ensure that the likelihood of flooding<sup>92</sup> and resultant risks posed to human health<sup>93</sup> and material assets are fully mitigated.

- **Greenhouse Gases and Car Dependency**

By providing for the consolidation / regeneration of the existing built-up area, as well as the planned expansion of the existing development envelope into the Environs, this scenario would help to minimise increases in emissions, make public transport more economically viable, reduce overall journey times and distances and reduce car dependency<sup>94</sup>.

- **Archaeological Heritage**

Impacts on both known monuments - due to infringements - and unknown archaeological heritage - due to construction and demolition - could occur as a result of individual projects<sup>95</sup>.

<sup>87</sup> SEOs B1 B2 B3

<sup>88</sup> SEOs B1 B2

<sup>89</sup> SEO HH1

<sup>90</sup> SEO M1

<sup>91</sup> SEOs W1 W2 W3 W4

<sup>92</sup> SEO W5

<sup>93</sup> SEO HH1

<sup>94</sup> SEOs A1 M2

<sup>95</sup> SEO CH1



- **Architectural Heritage**

By providing for the regeneration of certain areas within the town and the encouragement of controlled brownfield development this scenario would be likely to achieve the long term protection of architectural heritage<sup>96</sup>. Potential impacts arising from regeneration projects and brownfield development would need to be mitigated however.

- **Landscape**

If unmitigated, Scenario 3 could result in adverse impacts upon sensitive landscape components particularly as a result of development at both Hazlewood/Ballinode and the Docklands<sup>97</sup>.

- Compact development will support the commercial vitality and viability of the City Centre.
- A compact city would be protected by a robust buffer zone around it, which will retain valuable agricultural land and appropriately reserve land for any future planned expansion.
- Planned compact development would have less impact on the visual / archaeological amenities and designated nature conservation sites.

Disadvantages:

- Compact development would be hindered by difficulties with land assembly, because of the fragmentation of ownership and higher land costs.
- Possible ground contamination and other environmental issues would hold back the regeneration of the Docklands.
- Any insensitive juxtaposition of existing and new development would have a negative impact on the old town fabric and remaining built heritage.
- New/infill development may be precluded by NIMBY-ism, which is gradually becoming more noticeable in Sligo, especially in the case of proposed development adjoining established residential areas.

## 7.5.2 Planning Effects

Advantages:

- Regenerating areas that comprise a substantial amount of brownfield lands would make use of existing services, infrastructure and facilities.
- Planned expansion would occur in areas where essential infrastructure is also proposed, thus maximising its use on an economic base.
- Regeneration and new development would take place close to existing social infrastructure and community facilities, or in tandem with the provision of new facilities of this kind. This type of development would strengthen existing communities and support the provision of new neighbourhood centres.
- Planned expansion represents a sequential approach, founded on the principles of sustainability, particularly with regard to land-use and transportation. A compact city favours pedestrian and cycle linkages, and also is suitable for the provision of a viable public transport system.

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<sup>96</sup> SEO CH2

<sup>97</sup> SEO L1

## 7.6 Evaluation of Environmental Effects

Alternative Scenario	Likely to <b>Improve</b> status of SEOs	Probable <b>Conflict</b> with status of SEOs - unlikely to be mitigated	Potential <b>Conflict</b> with status of SEOs - would be mitigated
<b>Alternative Scenario 1</b> <i>Doughnut City</i>	CH2 (Short term)	B3 HH1 S1 W1 W2 W3 W4 W5 M1 M2 A1 L1 CH1  CH2 (Long term)	B1 B2
<b>Alternative Scenario 2</b> <i>Horseshoe City</i>	CH2 (Short term)	B1 B2 B3 S1 L1 A1 M2 W5  CH2 (Long term)	B1 B2 HH1 W1 W2 W3 W4 M1 CH1
<b>Alternative Scenario 3</b> <i>Compact City</i>	S1 A1 M1 M2  B3 (Outside Plan area)  CH2 (Long term)		B1 B2 B3  B3 (within Plan area)  HH1 W1 W2 W3 W4 W5 L1 CH1  CH2 (Short term)

**Table 7.3 Evaluation of Scenarios against Strategic Environmental Objectives**

## 7.7 Conclusion

Having regard to the evaluation presented in Sections 7.3 to 7.6 above, the alternative scenario with the least number and extent of potential environmental effects is Alternative Scenario 3 *Compact City*.

## 7.8 The Development Plan

Scenario 3 *Compact City* was chosen to be developed for the Draft Development Plan by the plan-making team having regard to both environmental and planning - including social and economic - effects.

The likely significant environmental effects<sup>98</sup> of implementing Scenario 3 as identified in Sections 7.3 to 7.6 fully reflect the likely significant effects of implementing the Development Plan including the land use zoning included in the Plan (see Figure 7.1). The environmental effects of implementing the policies and objectives required to achieve Scenario 3 are presented in Section 8.

<sup>98</sup> Including secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects.

With the integration of appropriate mitigation measures (including those described in Section 9 of this report) potential adverse environmental effects which could arise as a result of implementing this scenario would be likely to be avoided, reduced or offset.

It is noted that 16 Amendments to the Zoning Map which was placed on public display as part of the Draft Plan were adopted as part of the Plan.

10 of these amendments were identified as not being likely to result in potential conflicts with the status of the SEOs.

6 of the amendments were identified as not being likely to potentially cumulatively conflict with the status of a number of SEOs (B2, B3, HH1, W1, W2, W3, W4, W5, L1, CH1 & CH2) however these conflicts were identified as being likely to be mitigated by measures which have been integrated into the Plan, including those described in Section 9 of this report.



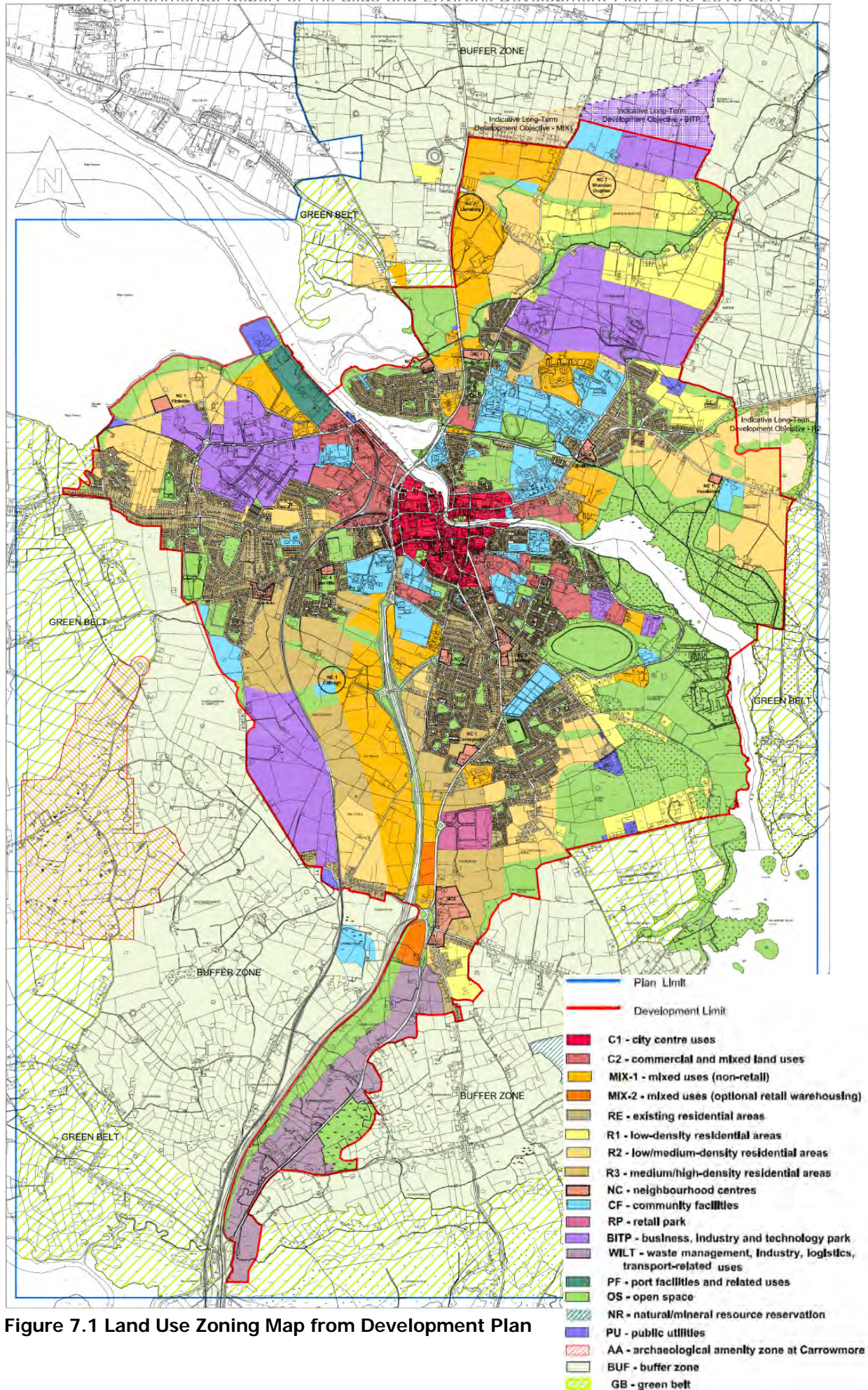


Figure 7.1 Land Use Zoning Map from Development Plan



## Section 8 Evaluation of Plan Policies and Objectives

### 8.1 Methodology

This section evaluates the Development Plan's goals, aims, policies and objectives. Strategic Environmental Objectives (SEOs) are used as outlined under Section 7.2.2 in order to evaluate the relevant measures of the Plan. Use has been made of the environmental baseline descriptions and the maps of the individual components which are provided in Section 3 for this purpose.

The interactions between the SEOs and the policies and objectives of the Development Plan determine the effects of implementing the Plan. These effects include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects. Table 8.1 brings together all the SEOs which have been developed from international, national, regional and county policies which generally govern environmental protection objectives.

SEO Code	SEO
<b>B1</b>	To avoid loss of relevant habitats, geological features, species or their sustaining resources in designated ecological sites
<b>B2</b>	To avoid significant adverse impacts, including direct, cumulative and indirect impacts, to relevant habitats, geological features, species or their sustaining resources in designated ecological sites by development within or adjacent to these sites
<b>B3</b>	To sustain, enhance or - where relevant - prevent the loss of ecological networks or parts thereof which provide significant connectivity between areas of local biodiversity
<b>HH1</b>	To protect human health from hazards or nuisances arising from exposure to incompatible landuses
<b>S1</b>	Maximise the sustainable re-use of brownfield lands, and maximise the use of the existing built environment rather than developing greenfield lands <sup>99</sup>
<b>W1</b>	To maintain and improve, where possible, the quality of rivers and lakes
<b>W2</b>	To maintain and improve, where possible, the quality of transitional waters
<b>W3</b>	To prevent pollution and contamination of ground water
<b>W4</b>	To prevent pollution and contamination of bathing water
<b>W5</b>	To prevent development on lands which pose - or are likely to pose in the future - a significant flood risk
<b>A1</b>	To minimise increases in travel related greenhouse emissions to air
<b>M1</b>	To serve new development with appropriate waste water treatment
<b>M2</b>	To reduce car dependency within the Plan area by way of, inter alia, encouraging modal change from car to more sustainable forms of public transport and encouraging development which will not be dependent on private transport
<b>CH1</b>	To protect the archaeological heritage of Sligo and Environs with regard to entries to the Record of Monuments and Places - including Zones of Archaeological Potential - and the context of the above within the surrounding landscape where relevant
<b>CH2</b>	To preserve and protect the special interest and character of Sligo and Environs architectural heritage with regard to entries to the Record of Protected Structures and their context within the surrounding landscape where relevant
<b>L1</b>	To avoid significant adverse impacts on the landscape, especially with regard to landscapes which are most valuable and most sensitive to change and protected views and routes

**Table 8.1 Strategic Environmental Objectives (SEOs)**<sup>100</sup>

<sup>99</sup> SEO S1 was identified as conflicting with SEOs CH1 and CH2

<sup>100</sup> Strategic Environmental Objectives (SEOs) are methodological measures which are developed from international, national, regional and county policies which generally govern environmental protection objectives and against which the environmental effects of the Plan can be tested. The SEOs are used as standards against which the development strategies, policies and objectives of the Plan can be evaluated in order to help identify areas in which significant adverse impacts are likely to occur, if unmitigated against.

## **8.2 Note: Uncertainty of Plan Measures**

With regard to goals, aims, policies and objectives evaluated as having an uncertain interaction with the status of SEOs, the interaction, and environmental impacts, if any, which the implementation of these Plan measures would have would be determined by: the nature and extent of development arising from these Plan measures, and; site specific environmental factors. These impacts may be assessed as part of a lower tier SEA, as part of an EIA of a particular project and/or by the development management process.

Avoidance of conflict is dependent upon the development management process only granting permission for individual projects arising from these measures which do not conflict with the status of SEOs. Providing other Plan measures, including the measures recommended by this report, and measures arising out of lower tier assessments are complied with, conflicts with SEOs would be likely to be avoided.



## 8.3 Chapter 1: Introduction

	Likely to <b>Improve</b> status of SEOs	Probable <b>Conflict</b> with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	Uncertain interaction with status of SEOs	<b>Neutral</b> interaction with status of SEOs	<b>No Likely</b> interaction with status of SEOs
<b>Overall Sligo Gateway Vision</b>						
<b>Compact City</b> <ul style="list-style-type: none"> <li>enhancement of the urban core through the promotion of higher-density, mixed-use developments capable of expanding on existing city centre qualities, especially the historic urban fabric with key buildings of architectural value; civic, cultural and religious institutions; public squares and market places, pedestrian links and riverside walks;</li> <li>consolidation of existing residential and mixed-use areas through appropriate replacements or infill development and enhancement/provision of essential retail, community and recreation facilities within neighbourhood centres and open-space areas;</li> <li>regeneration of areas such as Cranmore and the Docklands, through comprehensive, masterplan-based redevelopment with a view to provide high-quality living, working and leisure space;</li> <li>plan-led, phased expansion of the city towards the east at Ballinode-Hazelwood; towards the north at Lisnalgur-Rathbraghan-Shannon Oughter; and towards the south-west at Caltragh-Carrowroe</li> </ul>	<b>A1 M2 CH2 S1</b>		<b>B1 B2 B3 HH1 W1 W2 W3 W4 W5 M1 CH1 L1</b>	✓		
<b>Liveable City</b> <ul style="list-style-type: none"> <li>creation of a safe, attractive urban environment where residents and visitors can enjoy the historical inheritance, the high-quality design of new buildings and the well-maintained public spaces; artists and traders can give new life to old and new market places; movement is easy and well-managed.</li> </ul>				✓		
<b>Accessible City</b> <ul style="list-style-type: none"> <li>offering not only a range of transport options, but also access to affordable homes, healthcare, educational, cultural and recreational facilities, as well as easy access to the exquisite natural environment and archaeological heritage surrounding the city.</li> </ul>				✓		
<b>Green City</b> <ul style="list-style-type: none"> <li>making efficient use of natural resources, respecting the natural environment, conserving energy, minimising noxious waste and emissions, maximising the usage of urban open space and encouraging eco-friendly design and construction methods.</li> </ul>				✓		
<b>Enterprising City</b> <ul style="list-style-type: none"> <li>supporting entrepreneurship and innovation, and providing a skilled work force to business and industry and ensuring that the spatial strategy and physical infrastructure are conducive to economic growth.</li> </ul>				✓		
<b>Creative City</b> <ul style="list-style-type: none"> <li>celebrating the unique heritage, promoting the creative industries and the arts, striving to make culture a growth driver, a catalyst for urban regeneration and a tourist attractor.</li> </ul>				✓		

## 8.4 Chapter 3: Strategic Goals and Broad Aims of the SEDP

	Likely to <b>Improve</b> status of SEOs	Probable <b>Conflict</b> with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	Uncertain interaction with status of SEOs	<b>Neutral</b> interaction with status of SEOs	<b>No Likely</b> interaction with status of SEOs
<b>Strategic Goals</b>						
<b>SG-1</b> To support the full implementation of the Gateway status for the City of Sligo, as set out in the NSS, by ensuring the structured and orderly development of Sligo as a compact and sustainable city.			B1 B2 B3 HH1 W1 W2 W3 W4 W5 M1 CH1 CH2 L1	✓		
<b>SG-2</b> To encourage and facilitate the economic development of the Gateway, in co-operation with relevant government bodies, third-level institutions, other state/semi-state agencies and the private sector.			B1 B2 B3 HH1 W1 W2 W3 W4 W5 M1 CH1 CH2 L1	✓		
<b>SG-3</b> To promote vigorously Sligo City's keystone role in the County Settlement Strategy, while managing growth in the Subregion and consolidating the Key Support Towns that sustain villages and rural communities in County Sligo.			B1 B2 B3 HH1 W1 W2 W3 W4 W5 M1 CH1 CH2 L1	✓		
<b>SG-4</b> To drive forward the development of the Gateway City of Sligo towards a target population of 42,000 by 2020.			B1 B2 B3 HH1 W1 W2 W3 W4 W5 M1 CH1 CH2 L1	✓		
<b>SG-5</b> To ensure that the nationally- and internationally-renowned natural and cultural heritage of Sligo City is wisely conserved and enhanced, as a key aspect of Sligo's identity and attractiveness to economic activity, and as a legacy to be handed forward to future generations.	B1 B2 B3 HH1 W1 W2 W3 W4 M1 CH1 CH2 L1					
<b>SG-6</b> To build up linkages between Sligo and Gateways/Hubs within the Border Region and adjoining regions, such as the Western Region and Northern Ireland, by supporting the implementation of the RPGs, collaborating on support for critical enabling infrastructure such as road and rail connections, and cooperating in areas of mutual planning interest.			B1 B2 B3 HH1 W1 W2 W3 W4 W5 M1 CH1 CH2 L1	✓		

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Broad Aims							
<b>BA-1 Supporting balanced economic development</b> <ul style="list-style-type: none"><li>Facilitate and encourage the sustainable development of the Gateway City of Sligo as an economic growth driver for the North-West, in accordance with the NSS.</li><li>Integrate business locations with the surrounding land use and transportation network.</li><li>Work with the providers of infrastructure to ensure adequate provision in terms of road, rail, aviation, energy and telecommunications.</li><li>Work in partnership with key organisations, such as the Industrial Development Agency and Enterprise Ireland, whose remit it is to promote and/or secure economic development.</li><li>Involve Sligo Institute of Technology in the promotion of Sligo as a centre of third-level education and hence an attractive place for investment</li><li>Promote Sligo City as a suitable location for the relocation/decentralisation of state and semi-state bodies.</li><li>Promote Sligo as a higher-order retail and service centre – including healthcare, education, recreation and culture – for a regional catchment area.</li></ul>				B1 B2 B3 HH1 W1 W2 W3 W4 W5 M1 CH1 CH2 L1	✓		
<b>BA-2 Carefully managing development patterns</b> <ul style="list-style-type: none"><li>Implement a robust settlement strategy that emphasises the role of the Gateway City and seeks to maintain the distinctive landscape attributes of Sligo.</li><li>Encourage a mix of land uses integrated with an effective transport network, capable of supporting viable public transport systems and reducing car-based commuting.</li><li>Promote the consolidation of Sligo City through regeneration and phased expansion based on local area plans.</li><li>Counteract tendencies towards extensive ribbon development and urban sprawl in the immediate environs of Sligo.</li><li>Strengthen existing rural communities by ensuring that the planning system facilitates both the housing needs of all persons with links to rural areas, as provided for in the NSS, as well as local enterprise initiative.</li></ul>		A1 M2 S1		B1 B2 B3 HH1 W1 W2 W3 W4 W5 M1 CH1 CH2 L1	✓		
<b>BA-3 Protecting environmental quality</b> <ul style="list-style-type: none"><li>Wisely conserve the natural and built heritage of Sligo City and the surrounding area, including the character of the landscape, views and prospects, and the environmental quality of the urban setting.</li><li>Conserve the historic form and character of Sligo City.</li><li>Protect the landscape character and ecological integrity of the coastal and lakeshore zone.</li><li>Promote sustainable water use based on long-term protection of water resources and provide for sufficient supply of good quality surface and groundwater.</li><li>Implement the (Draft) Western River Basin Management Plan (WRBMP).</li><li>Support the implementation of the National Climate Change Strategy 2007-2012 and successor documents.</li></ul>		B1 B2 B3 HH1 W1 W2 W3 W4 W5 A1 M1 M2 CH1 CH2 L1					
<b>BA-4 Increasing mobility sustainably</b> <ul style="list-style-type: none"><li>Target, prioritise and promote investment in inter-city road and rail connections, as a means of realising Sligo's potential as an important economic centre in the North-West.</li><li>Support effective and sustainable public transport through the provision of a quality bus and rail service with adequate park-and-ride facilities, alongside the promotion of cycle and pedestrian links.</li><li>Encourage large employers, including public services (such as schools) to locate on sites where public transport is available or can be easily provided.</li><li>Support the development and use of Sligo Regional Airport so as to ensure and enhance Sligo's accessibility to tourists and businesses, both nationally and internationally.</li></ul>		A1 M2		B1 B2 B3 W5 CH1 L1	✓		
<b>BA-5 Delivering improved infrastructure</b> <ul style="list-style-type: none"><li>Provide adequate drinking water, wastewater treatment, water management services and associated network capacity to accommodate the projected needs of the future population and local businesses.</li><li>Maximise the use of existing water supply, sewerage, electricity and telecommunications networks and support the extended provision of broadband.</li><li>Promote the development of gas supply and the generation of alternative energy forms in Sligo.</li><li>Implement the Connacht Waste Management Plan 2006-2011 and successor policy documents.</li><li>Extend the range of recreational facilities and infrastructure provided within parks and other types of open space throughout the Plan area.</li></ul>		HH1 W1 W2 W3 W4 M1		B1 B2			



## 8.5 Chapter 4: Growth model and key planning issues

	Likely to <b>Improve</b> status of SEOs	Probable <b>Conflict</b> with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	Uncertain interaction with status of SEOs	<b>Neutral</b> interaction with status of SEOs	<b>No Likely</b> interaction with status of SEOs
<b>Strategic Zoning Policies</b>						
<b>SP-Z-1</b> Promote the growth of a compact Gateway City with a strong commercial/retail core and economic base.				✓		
<b>SP-Z-2</b> Ensure that sufficient land is available for a wide range of uses at appropriate locations in order to achieve the balanced development of the city in the long-term.				✓		
<b>SP-Z-3</b> Facilitate mixes of uses appropriate for each area with a view to reducing the need to travel between home, work and local facilities.	A1 M2					
<b>SP-Z-4</b> Encourage the redevelopment of underutilised and brownfield lands especially in the inner city area, thus increasing the efficient use of essential infrastructure.	S1		CH1 CH2			
<b>SP-Z-5</b> Protect designated nature conservation sites, landscape, archaeology, valuable natural amenity areas, water and natural resources, while allowing for the possible further expansion of the city in the long-term.	B1 B2 B3 HH1 W1 W2 W3 W4 W5 M1 CH1 L1					
<b>SP-Z-6</b> Safeguard and improve existing amenities.				✓		
<b>SP-Z-7</b> Make adequate land reservations for the sustainable development of future infrastructural projects.				✓		
<b>Local Area Plans – Objectives</b>						
<b>LAP-O-1</b> Pursue the adoption of the North Fringe Local Area Plan by the end of 2009.				✓		
<b>LAP-O-2</b> Review Hazelwood-Ballinode LAP by the end of October 2010.						
<b>LAP-O-3</b> Prepare a Local Area Plan, including a masterplan, for Cranmore, Cleveragh and adjoining areas located in the south-eastern quarter of Sligo and Environs, during the lifetime of the SEDP 2010-2016.				✓		
<b>LAP-O-4</b> Prepare a Local Area Plan, including a masterplan, for the Docklands and adjoining areas located in the north-western quarter of Sligo and Environs, during the lifetime of the SEDP 2010-2016.				✓		
<b>LAP-O-5</b> In the longer term, prepare a Local Area Plan, including a masterplan, for Caltragh-Carrowroe and adjoining areas in the south-western quarter of Sligo and Environs.				✓		
<b>LAP-O-6</b> Incorporate a Strategic Transport Assessment to inform land-use and access proposals as part of the preparation of all future Local Area Plans.	A1 M2					

## 8.6 Chapter 6: Economy

	Likely to <b>Improve</b> status of SEOs	Probable <b>Conflict</b> with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	Uncertain interaction with status of SEOs	<b>Neutral</b> interaction with status of SEOs	<b>No Likely</b> interaction with status of SEOs
<b>Strategic economic policies</b>						
<p>SP-ECON-1 Facilitate and encourage the business, enterprise and industrial development of Sligo as a Gateway City and economic growth driver for the North-West.</p> <p>SP-ECON-2 Support the implementation of the Economic Development Strategy of the County Development Board.</p> <p>SP-ECON-3 Promote Sligo as a location for government decentralisation and facilitate government offices to locate in the southern part of the Economic Spine.</p> <p>SP-ECON-4 Liaise with the IDA, Enterprise Ireland and other relevant bodies to attract international and indigenous industry, enterprise and employment to the city.</p> <p>SP-ECON-5 Ensure that employment-related development is maintained and consolidated, in particular with regard to the city's promotion as a major centre for retailing, services, tourism and culture.</p> <p>SP-ECON-6 Promote an expanded education and research sector in Sligo.</p> <p>SP-ECON-7 Provide or facilitate the provision of adequate transport, environmental and broadband telecommunications infrastructure to support business, enterprise and industrial development in Sligo City and Environs.</p> <p>SP-ECON-8 Encourage and facilitate the retention, expansion and diversification of healthcare and associated services in the Gateway.</p>			<p>B1 B2 B3 HH1 S1 W1 W2 W3 W4 W5 A1 M1 M2 CH1 CH2 L1</p>			
<b>Business, enterprise and industry policies</b>						
<p>P-BEI-1 Ensure that there are sufficient lands zoned for business, enterprise and industrial development.</p> <p>P-BEI-2 Encourage the integration of employment locations with other land uses and the transportation network and in particular, ensure that the location of employment intensive land uses are located in proximity to existing and planned strategic routes, where public transport is most viable.</p> <p>P-BEI-3 Facilitate development proposals for industrial units or business enterprises in the Buffer Zone only where:</p> <ol style="list-style-type: none"> <li>the proposed use has locational requirements that can only be accommodated in a rural area and this has been demonstrated to the satisfaction of the Planning Authority AND</li> <li>the resultant development is of a size and scale that does not impact negatively on the character and amenity of the surrounding area AND</li> <li>the proposal demonstrates that it has taken into account traffic, public health, environmental and amenity considerations and is in accordance with the policies, requirements and guidance contained in this plan.</li> </ol> <p>In all instances, it should be demonstrated that the proposal would not generate traffic of a type and amount inappropriate for the character of the access roads, and would not require improvements that might affect the character of these roads.</p>	A1 M2 S1		<p>B1 B2 B3 HH1 W1 W2 W3 W4 W5 M1 CH1 CH2 L1</p>			

<p>P-BEI-4 Encourage office development close to strategic transport corridors, in the city centre, in neighbourhood centres and in mixed-use zones.</p> <p>P-BEI-5 Facilitate the accommodation of business starter units.</p> <p>P-BEI-6 Support the concept of live/work units in mixed-use zones and residential areas, subject to compatibility with predominant uses in the area.</p> <p>P-BEI-7 Apply a flexible zoning approach in relation to the location of entrepreneurial start-up businesses and small-scale industrial activities, where it can be demonstrated that the proposed use would have minimal adverse impacts on adjoining uses and properties. In such cases a sequential approach to the location of the development will generally apply with a general preference order of city centre, edge-of-centre and then out-of-centre locations, depending on the nature and type of business.</p> <p>P-BEI-8 Encourage the reuse of vacant public institutional buildings for office and enterprise activity, where community and services facilities are no longer necessary.</p> <p>P-BEI-9 Provide for a differentiation of uses between the business and enterprise parks zoned BITP, to accommodate various types and levels of industrial/business activity, and allow limited retail uses specifically on the lands zoned as BITP at Cleveragh.</p> <p>P-BEI-10 Encourage high-quality, innovative design standards in all new industrial/ business/ enterprise parks, in terms of building design and materials, layout and landscaping, in particular within Oakfield Business Park and along the Inner Relief Road.</p> <p>P-BEI-11 Where industrial sites are developed adjacent to residential areas, ensure there is adequate screening in the form of tree planting and landscaping.</p>						
<b>Business, enterprise and industry - objectives</b>						
<p>O-BEI-1 Promote and facilitate the realisation of a new business, industry and technology park at Oakfield on lands zoned BITP to the west of the N4 (Inner Relief Road) off the Caltragh Interchange.</p> <p>O-BEI-2 Promote and facilitate the realisation of a new business, industry and technology park in the North Fringe on lands zoned BITP at Carncash.</p> <p>O-BEI-3 Promote and facilitate the realisation of a new business, industry and technology park in Cleveragh where small-scale workshops with retail functions will be permissible, provided the retail is ancillary to an industrial or business unit. The retail spaces shall be restricted to a maximum of 100 sq.m. and shall be limited to bulky goods.</p>			<p>B1 B2 B3 HH1 W1 W2 W3 W4 W5 M1 CH1 CH2 L1</p>			
<b>Strategic retail planning policies</b>						
<p>SP-RP-1 Consolidate Sligo's role as regional shopping centre and Gateway City.</p> <p>SP-RP-2 Assist the city in making the transition from a third-tier to a second-tier shopping centre in the national retail hierarchy.</p> <p>SP-RP-3 Provide overall retail space in line with projected requirements outlined in Table 6.E and the Joint City and County Retail Planning Strategy.</p> <p>SP-RP-4 Facilitate a competitive and healthy environment for retail in Sligo.</p> <p>SP-RP-5 Ensure that retail development is accessible by both public transport and private car, so as to ensure accessibility to all groups of the population, particularly the elderly and families with young children.</p>			<p>B1 B2 B3 HH1 W1 W2 W3 W4 W5 A1 M1 M2 CH1 CH2 L1</p>			



City centre and General retail planning policies						
<p>P-RP-1 Encourage a range of shopping facilities in Sligo's City Centre.</p> <p>P-RP-2 Encourage national-chain retail branches and retail department stores to locate within the city centre by ensuring the provision of medium- to larger-sized retail units in new developments.</p> <p>P-RP-3 Reinforce existing retail areas, in particular the Market Cross/Castle Street and High Street area, by facilitating the realisation of a multi-storey car park at Abbey Street.</p> <p>P-RP-4 Oversee the successful implementation of the Centre Block Masterplan.</p> <p>P-RP-5 Generally discourage changes of use from retail or service (including banks and similar institutions with over the counter services) to non-retail or non-service at ground-floor level within the following areas: O'Connell Street, Grattan Street, Castle Street, Market Street, High Street, Rockwood Parade, Tobergal Lane, Abbey Street and Stephen Street.</p> <p>P-RP-6 Encourage specialist retail shops on Castle Street/Old Market Street and at The Mall, in conjunction with the Green Fort project.</p> <p>P-RP-7 Seek to preserve and enhance existing traditional shop fronts of high quality.</p> <p>P-RP-8 Discourage certain types of commercial and retail development at ground-floor level on Rockwood Parade, JFK Parade, Kempton Promenade and in the vicinity of Stephen Street Car Park, where the proposed use is likely to detract from the ambience of the riverside area. Uses that generate activity and contribute to the pedestrian realm and/or facilitate window-shopping will be viewed favourably. The following class of retail or service outlet will generally be considered acceptable in these areas: restaurants, cafés, bars, clothing, footwear, books, arts/crafts, newsagents, bakeries, gifts, china, glass and leather goods, florists, jewellers/clocks, sports, toys, hobbies, hairdressing and beauty/health. A high standard of urban design and shop front fascia is expected, in keeping with the area.</p> <p>P-RP-9 Encourage modern shop fronts which respect context, where existing shop fronts are not worthy of preservation.</p> <p>P-RP-10 Facilitate a network of neighbourhood centres outside the city centre, accommodating a range of retail floor spaces. (see also Neighbourhood Centre objectives in Section 7.2.4)</p> <p>P-RP-11 Facilitate the provision of both large and discount food stores subject to compliance with the sequential approach and/or retail impact assessment.</p> <p>P-RP-12 Accommodate retail warehousing to the north of the city, to provide a north-south balance at the main Gateway access points.</p> <p>P-RP-13 Confine retail warehouse developments to the sale of bulky goods or goods generally sold in bulk and ensure these developments are of appropriate scale. Maximum 20% of the net floor space may be used for the sale of comparison goods ancillary to the main bulky goods if the connection between the two types of goods can be clearly demonstrated, and if it can be shown that the city centre would not suffer adverse impacts.</p> <p>P-RP-14 Adhere to the requirements of the sequential approach to retailing in line with national guidance.</p> <p>P-RP-15 Encourage the provision of retail development in locations that facilitate multi-purpose shopping, business and leisure trips on the same journey.</p>	S1		B1 B2 B3 HH1 W1 W2 W3 W4 W5 M1 CH1 CH2 L1	A1 M2		

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<p>P-RP-16 Ensure that the amount of convenience floor space to be provided in the city centre is be commensurate with existing and projected population.</p> <p>P-RP-17 Require a detailed retail impact assessment to accompany planning applications where appropriate, to demonstrate the need for the additional retail space.</p> <p>P-RP-19 Require high-quality design and layout, encouraging active and engaging frontages where appropriate.</p>						
<b>Retail Planning Objectives</b>						
<p>O-RP-1 Assess the provision of new retail development in accordance with the sequential test as outlined in the Sligo City and County Joint Retail Planning Strategy.</p> <p>O-RP-2 Promote the Centre block and Quayside Shopping Centre as the priority areas for the provision of new medium and large-scale retail units in Sligo, to accommodate multiples and key attractor stores.</p> <p>O-RP-3 Create an arts, crafts, antiques, organic foods and gastronomy-focused street market on the site of Stephen Street Car Park.</p> <p>O-RP-4 Encourage specialist and small-scale tourist-related retail outlets to locate on the south side of Abbey Street. Suitable uses include antiques, crafts, gifts and cafés. Commercial and office uses and/or apartments would be suitable on upper floor levels.</p> <p>O-RP-5 Seek to regenerate and encourage specialist retail units along Grattan Street/ Castle Street and Old Market Street.</p> <p>O-RP-6 Seek to refurbish the pedestrianised O'Connell Street to provide a pedestrian friendly space.</p> <p>O-RP-7 Encourage the provision of retail uses ancillary to the proposed County Museum and Model Niland Gallery within the Greenfort area.</p>	<b>S1</b>		<p><b>B1 B2 B3</b> <b>HH1 W1</b> <b>W2 W3</b> <b>W4 W5</b> <b>M1 CH1</b> <b>CH2 L1</b></p>	<b>A1 M2</b>		
<b>Neighbourhood centre objectives</b>						
<p>NC-1 Promote and facilitate new neighbourhood centres with a maximum net retail floor space of 1,500 sq.m. at the following locations:</p> <ul style="list-style-type: none"> <li>• Cornageehera</li> <li>• Shannon Oughter</li> <li>• Finisklin</li> <li>• Ballytivnan</li> <li>• Hazelwood</li> <li>• Caltragh</li> <li>• Oakfield</li> </ul> <p>NC-2 Promote the development of suburban, larger neighbourhood centres with a maximum net retail floor space of 2,750 sq.m., of which up to 1750 sq.m. net floor space can be dedicated to convenience retail units, to allow for small supermarket provision) at the following locations:</p> <ul style="list-style-type: none"> <li>• Carrowroe</li> <li>• Lisnalgur</li> </ul>			<p><b>B1 B2 B3</b> <b>HH1 W1</b> <b>W2 W3</b> <b>W4 W5</b> <b>M1 CH1</b> <b>CH2 L1</b></p>	<b>A1 M2</b>		

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<p>NC-3 Support the enhanced provision of convenience retail units at two locations in the Inner City where characteristics of neighbourhood centres are existing or emerging, and encourage their development towards levels of provision similar to those of suburban neighbourhood centres (NC-2). These locations are:</p> <ul style="list-style-type: none"> <li>• Cleveragh</li> <li>• Ballinode</li> </ul> <p>NC-4 Reinforce and encourage the consolidation of neighbourhood centres with a maximum net retail floor space of 1,750 sq.m. in the following areas:</p> <ul style="list-style-type: none"> <li>• Merville</li> <li>• Cartron</li> <li>• Crozon</li> </ul>						
<p><b>Tourism policies</b></p> <p>P-TOU-1 Ensure that future development of tourist-related facilities is carried out in a sensitive and sustainable manner.</p> <p>P-TOU-2 Promote the Abbey as a key tourist attraction in the city and examine opportunities to open up views, vistas and physical connections between it and the river.</p> <p>P-TOU-3 Support the establishment of Sligo as a key destination for Yeats-related tourism.</p> <p>P-TOU-4 Promote the development of specialist tourist shops, including arts and crafts, along Abbey Street, along The Mall and in particular look into re-using some of the shops immediately opposite the Model::Niland Gallery.</p> <p>P-TOU-5 Improve the signposting of scenic routes, walks, riverside trails, historic and archaeological heritage features in an attractive and well-designed manner, in order to promote the walking and cycling tourism product.</p> <p>P-TOU-6 Facilitate the sustainable development of eco-tourism and other leisure activities in the environs of Sligo, outside the proposed urban edge (development limit boundary), such as equestrian centres, outdoor recreational centres, bird-watching, boat clubs and canoe rental.</p> <p>P-TOU-7 Support and promote, with the co-operation of private landowners, public access to heritage sites and features of archaeological interest.</p> <p>P-TOU-8 Work with North West Tourism, The Arts Council and other relevant bodies to promote and develop the tourism sector in Sligo.</p> <p>P-TOU-9 Explore the potential promotion of the city's churches and graveyards as historical elements of interest to tourists.</p> <p>P-TOU-10 Reinforce Local Authority and Heritage signage through enforcement action against illegal signage.</p> <p>P-TOU-11 Support the County Development Board in developing a tourism strategy for Sligo City and County.</p>	<p><b>A1 M2 CH1 CH2 L1 S1</b></p>					



<b>Tourism Objectives</b>						
<p>O-TOU-1 Explore the provision of fishing stands and other facilities (e.g. jetties) on the shores of Lough Gill, so as to enhance the attraction for fishermen, anglers, boating/rowing clubs etc., and concomitantly explore the provision or improvement of access, parking facilities and, where appropriate, boat access to these facilities.</p> <p>O-TOU-2 Explore the possible provision of a heritage trail in the city and environs that might include such features as the St. John's Cathedral, the Courthouse, City Hall, Old Market Street, the Abbey, Forthill, the Model Niland, the County Museum, the Famine Graveyard and the archaeological features of Carrowroe and its vicinity.</p> <p>O-TOU-3 Develop a new tourist office within the city centre within easy walking distance of the train station, railway station and commercial core. This would provide information to visitors and tourists as they arrive to the city (from the proposed transport interchange) on tours, walks, hotels and accommodation, etc.</p> <p>O-TOU-4 Improve and enhance access to Carrowmore Passage Tomb Cemetery by means of road improvements and co-ordinated signage from city centre and main approaches.</p> <p>O-TOU-5 Encourage the refurbishment and re-usage of Hazelwood House, to provide a tourist, recreational, cultural and/or heritage attraction.</p>	<b>S1</b>		<b>B1 B2 B3 CH1</b>			
<b>Agriculture Policies and Objectives</b>						
<p>P-AG-1 Facilitate sustainable agricultural activities within the Buffer Zone and the Green Belt.</p> <p>O-AG-1 Protect high-quality agricultural land within the Buffer Zone and Green Belt.</p>	<b>B3 L1</b>			<b>B1 B2</b>		
<b>Natural Resources Policies</b>						
<p>P-NR-1 Ensure that the extraction of natural resources is consistent with the principles of sustainable development.</p> <p>P-NR-2 Seek to safeguard valuable, unworked deposits for future extraction.</p> <p>P-NR-3 Ensure that on completion of quarrying operations, sites are restored and left in a satisfactory state to be of beneficial after-use.</p> <p>P-NR-4 Seek the reuse of worked-out quarries for recreational, industrial, ecological and other uses following appropriate restoration.</p> <p>P-NR-5 Ensure that aggregate extraction, processing, delivery, and associated concrete production are carried out in a manner which minimises adverse effects upon the environment and the local community.</p> <p>P-NR-6 Encourage the recycling of construction/demolition waste, particularly from local authority projects, as an additional source of aggregates for future developments.</p> <p>P-NR-7 Minimise the impact of quarrying on residential and natural amenities through rigorous licensing, development control and enforcement measures.</p> <p>P-NR-8 Encourage sustainable development proposals – subject to normal planning criteria – that can demonstrate a commitment to good environmental management through the implementation of recognised environmental management practices approved by the Planning Authorities.</p>			<b>B3 W1 CH1 L1</b>			

Natural Resources Objectives						
O-NR-1	Protect the natural resource reservation and existing quarrying operations at Aghamore and Carrownamadoo, by ensuring that any developments in the vicinity do not have a negative impact on the existing or future potential quarrying operations in the vicinity.			B3 W1 CH1 L1		

## 8.7 Chapter 7: Housing

		Likely to <u>Improve</u> status of SEOs	Probable <u>Conflict</u> with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	Uncertain interaction with status of SEOs	<u>Neutral</u> interaction with status of SEOs	<u>No Likely</u> interaction with status of SEOs
Strategic Housing Policies							
SP-HOU-1 Encourage an increased supply of private housing in the Sligo and Environs area and support the creation of sustainable communities through the provision of an appropriate range of housing types and high-quality residential environments. SP-HOU-2 Ensure that the needs of older citizens, people with disabilities and other special-needs persons and households are adequately and sustainably catered for in new developments. SP-HOU-3 Implement refurbishment and improvement schemes to maximise the utilisation of the existing social and affordable housing stock in the Sligo and Environs area. SP-HOU-4 Establish a register of eligible households interested in acquiring affordable housing. SP-HOU-5 Set aside 20% of eligible sites, which are the subject of new residential development (or a mix of uses including residential) for the development of social and affordable units, in accordance with the Housing Strategy and Part V requirements.	S1			B1 B2 B3 HH1 S1 W1 W2 W3 W4 W5 A1 M1 M2 CH1 CH2 L1			
Strategic Housing Objectives							
SO-HOU-1 Implement the Joint Housing Strategy of Sligo Borough Council and Sligo County Council. SO-HOU-2 Continue to monitor the extent of zoned lands in the Sligo and Environs area to ensure that sufficient land is zoned to accommodate housing demand over the Plan period. SO-HOU-3 Ensure that 20% of all sites eligible for Part V is set aside for the development of new social and affordable residential units. SO-HOU-4 Continue with the programme of refurbishment and regeneration of existing local authority housing stock.	S1			B1 B2 B3 HH1 S1 W1 W2 W3 W4 W5 A1 M1 M2 CH1 CH2 L1			
General Housing Policies							
GP-HOU-1 Have regard to the principle of sequential development in assessing all new residential development proposals, whereby areas closer to the city centre will be prioritised for development in advance of lands further from the city centre. Notwithstanding this principle, each proposal will be considered on its merits and having regard to the proper planning and sustainable development of the area. GP-HOU-2 Require high quality and innovation in the layout and design of new residential developments, particularly with regard to:	A1 M2 CH2 M1 W1 W2 W3 W4 HH1			W5 CH1			

<p>a. environmental sustainability and energy efficiency;</p> <p>b. site layouts and internal layouts that may incorporate live/work units and/or home zones;</p> <p>GP-HOU-3</p> <p>Ensure the provision of a suitable range of house types and sizes to facilitate the changing demographic structure of modern society, and in particular the increasing trend towards smaller household sizes. In private housing schemes, the following mix of house types should generally apply:</p> <p><i>House Type - Proportion in the scheme</i></p> <p>1-2 bedrooms - min. 30% of total no. of houses</p> <p>3 bedrooms - min. 30% of total no. of houses</p> <p>4+ bedrooms - min. 20% of total no. of houses</p> <p>GP-HOU-4</p> <p>Ensure, through the development management process, that access points to backland areas are reserved or that adequate road frontage is reserved to provide future road access to enable comprehensive backland development.</p> <p>GP-HOU-5</p> <p>Ensure that services and utilities in residential developments are provided concurrently with the construction of new dwellings.</p> <p>GP-HOU-6</p> <p>Ensure that all apartment and mixed-use developments provide for estate management so as to preserve the amenity, quality and visual character of the development, to ensure adequate maintenance of common facilities and areas, and encourage tenant involvement and participation in estate management. (refer also to the Development Management Standards - Chapter 16).</p>						
<b>City Centre Housing Policies</b>						
<p>P-CC-HOU-1</p> <p>Ensure that a high priority is given to locating residential development within the existing city centre, utilising brownfield sites, infill/gap sites, and upper floors of city centre areas ("living over the shop").</p> <p>P-CC-HOU-2</p> <p>Promote apartment and higher-density development in the City Centre (areas zoned C1 and C2).</p> <p>P-CC-HOU-3</p> <p>Encourage the retention of residential uses in existing residential properties within the city centre in order to maintain the distinct visual and social character of various city-centre areas.</p>	<b>S1 CH2 A1 M2</b>		<b>W5 CH1</b>			
<b>Inner City Housing Policies</b>						
<p>P-IC-HOU-1</p> <p>Encourage, where appropriate, redevelopment and regeneration in existing residential areas, including proposals for additional residential units and the introduction of new uses that are compatible with residential development.</p> <p>P-IC-HOU-2</p> <p>Improve the residential amenities of existing residential areas where necessary, through traffic calming, environmental improvements, provision of open spaces, landscaping, tree planting and the provision of community facilities.</p> <p>P-IC-HOU-3</p> <p>Ensure a balance between the reasonable protection of existing residential amenities, the established character of an area, and the need to provide for sustainable residential development.</p> <p>P-IC-HOU-4</p> <p>Consider the large-scale, comprehensive redevelopment of established residential areas in the context of Local Area Plan preparation.</p> <p>P-IC-HOU-5</p> <p>Ensure that any proposals for redevelopment of institutional lands incorporate the retention of suitable existing open spaces and landscape features for the use and enjoyment of the general public.</p>	<b>S1 M2 A1</b>		<b>CH2</b>			
<b>Inner City Housing Objective</b>						
<p>O-IC-HOU-1</p> <p>Support the redevelopment of institutional lands zoned for mixed residential and commercial uses at Summerhill College, Ursuline College and the Grammar School.</p>	<b>S1</b>		<b>CH2</b>			



<b>Outer City Housing Policies</b>						
<p>P-OC-HOU-1 Promote apartment and higher-density development in suitably zoned areas of the outer city, particularly in mixed-use development zones, neighbourhood centres, along strategic transport corridors and close to public transport nodes.</p> <p>P-OC-HOU-2 Facilitate lower-density development within the outer city on lands zoned R1 and, in appropriate cases, on lands zoned R2.</p>				<b>A1 M2</b>		
<b>Neighbourhood Centres Policies</b>						
<p>P-NEC-1 Promote the development of neighbourhood centres to serve the needs of new or expanding residential areas with basic facilities, such as local convenience shops, community facilities, childcare facilities, children's playgrounds etc.</p> <p>P-NEC-2 Encourage mixed-use developments at all neighbourhood centres, with a horizontal as well as vertical mix of uses, e.g. apartments or offices over shops.</p> <p>P-NEC-3 Facilitate the development of new residential units where this helps to consolidate existing neighbourhood centres by increasing the population needed to sustain local facilities such as shops, crèches, schools and public transport. Any such proposals should retain an appropriate balance between residential and commercial uses.</p> <p>P-NEC-4 Support social inclusion through the development of neighbourhood centres with a range of facilities catering for people of different ages, incomes and social backgrounds.</p>	<b>A1 M2</b>					
<b>Neighbourhood Centre Objectives</b>						
<p>O-NEC-1 Facilitate the regeneration of the neighbourhood centres at Cartron and Crozon by encouraging a variety of new uses, including small-scale business and enterprise units or starter units, in addition to community and neighbourhood uses.</p> <p>O-NEC-2 Promote and facilitate new neighbourhood centres at the following locations:</p> <ul style="list-style-type: none"> <li>▪ Cornageeha</li> <li>▪ Caltragh</li> <li>▪ Finisklin</li> <li>▪ Lisnalurg</li> <li>▪ Hazelwood (as identified in the Hazelwood-Ballinode LAP)</li> <li>▪ Shannon Oughter (as identified in the North Fringe LAP)</li> <li>▪ Ballytivnan</li> </ul> <p>O-NEC-3 Reinforce and encourage consolidation of development in the following areas, where characteristics of neighbourhood centres are existent or emerging:</p> <ul style="list-style-type: none"> <li>▪ Crozon</li> <li>▪ Merville</li> <li>▪ Ballinode</li> <li>▪ Cleveragh</li> <li>▪ Carrowroe</li> <li>▪ Cartron</li> <li>▪ Oakfield</li> </ul>	<b>S1</b>		<b>W5</b>			

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<p><b>Rural Housing Policies</b></p> <p>P-RHOU-1 Facilitate one-off rural housing in the cases of genuine rural-generated housing need, whilst discouraging urban-generated one-off rural housing proposals.</p> <p>P-RHOU-2 Ensure that any proposals for one-off housing on zoned lands within the development limit do not adversely impact on the potential for comprehensive and co-ordinated development of surrounding lands.</p> <p>P-RHOU-3 Ensure that one-off rural housing proposals do not adversely impact on the rural landscape or surrounding properties by reason of character and scale. In particular, proposals in areas which are visually and/or environmentally sensitive will be strictly controlled.</p> <p>P-RHOU-4 Require that all one-off rural housing proposals comply with EPA standards and guidelines for effluent treatment, and all other development management criteria and standards.</p> <p>P-RHOU-5 Facilitate suitable proposals for replacement dwellings and for the provision of infill development on gap sites within established patterns of substantial ribbon development.</p>			<p><b>B1 B2 B3</b> <b>HH1 W1</b> <b>W2 W3</b> <b>W4 W5 A1</b> <b>M1 M2</b> <b>CH1 CH2</b> <b>L1</b></p>			
<p><b>Social and Affordable Housing Policies</b></p> <p>P-SA-HOU-1 Promote social inclusion by ensuring that social and affordable housing is well distributed throughout all residential areas rather than concentrated in a few locations.</p> <p>P-SA-HOU-2 Ensure that development in areas subject to an agreement under Section 96 of the Planning and Development Act 2000 is integrated with the rest of the surrounding development, so as to avoid undue social segregation.</p> <p>P-SA-HOU-3 Ensure that the supply of housing units under the Housing Strategy reflects the current and anticipated demographic characteristics and household sizes.</p> <p>P-SA-HOU-4 Encourage linkages between existing public and private housing areas through the provision of shared facilities, services and pedestrian/cycle and vehicular connections, as appropriate.</p> <p>P-SA-HOU-5 Maintain the condition of existing social housing units and continue to carry out essential remedial works as funding permits.</p> <p>P-SA-HOU-6 Implement a broad-based Social and Affordable Housing Action Plan in line with national policy and funding commitments.</p> <p>P-SA-HOU-7 Promote joint ventures or public-private partnership arrangements with the private and voluntary sectors for the provision and management of housing.</p> <p>P-SA-HOU-8 Purchase houses on the open market as part of the annual housing programme in areas where a housing demand exists and where the houses represent value for money.</p> <p>P-SA-HOU-9 In lieu of building new Council housing, where practicable, improve or extend privately-owned houses, to eliminate defects or overcrowding problems.</p> <p>P-SA-HOU-10 Where a particular need is identified, provide housing schemes designed for the needs of older people and/or those with special needs. Otherwise, housing schemes shall be provided as a suitable mix of house types and designs which can be easily adapted to accommodate special housing needs.</p>			<p><b>B1 B2 B3</b> <b>HH1 W1</b> <b>W2 W3</b> <b>W4 W5 A1</b> <b>M1 M2</b> <b>CH1 CH2</b> <b>L1</b></p>			

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<b>Social and Affordable Housing Objectives</b>						
O-SA-HOU-1 Prepare and implement an updated Social and Affordable Housing Action Plan to address direct housing provision and assistance towards housing provision. O-SA-HOU-2 Continue with the programme of refurbishment and regeneration of existing council housing, including the preparation of a masterplan for the Cranmore area and adjacent lands, in the context of the envisaged Cranmore-Cleveragh Local Area Plan.				✓		
<b>Traveller accommodation policies</b>						
P-TA-HOU-1 Provide for the accommodation needs of Travellers, as far as is reasonable and practicable, using the full range of housing options available to the Local Authorities and having regard to the policies outlined in the Traveller Accommodation Programme 2009–2012. P-TA-HOU-2 Consider the submissions of Travellers, their representative organisations and those of the local communities in relation to the siting, planning and design of prospective halting sites or group housing schemes so as to avoid social conflict and promote social inclusion. P-TA-HOU-3 Provide and manage halting sites in a manner compatible with the local environment and the needs of the travelling community, based on management plans set up in co-operation with Traveller families. Halting sites will be subject to the detailed design standards as outlined in the Department of the Environment's Guidelines for Residential Caravan Parks for Travellers (October 1997), and normal development management standards.			B1 B2 B3 HH1 W1 W2 W3 W4 W5 A1 M1 M2 CH1 CH2 L1			
<b>Traveller accommodation objectives</b>						
O-TA-HOU-1 Provide appropriate accommodation to meet the needs of Travellers through the implementation of the Traveller Accommodation Programme 2005–2008 and the subsequent Traveller Accommodation Programme 2009–2012, when adopted, and the Joint Housing Strategy. O-TA-HOU-2 Provide Traveller accommodation at Alma Terrace, Glenview Park (Ash Lane), Finisklin, Cleveragh and Bundoran Road (refer to the Objectives Map).			B1 B2 B3 HH1 W1 W2 W3 W4 W5 A1 M1 M2 CH1 CH2 L1			
<b>Student accommodation policies</b>						
P-ST-HOU-1 Facilitate student accommodation on student campuses or in locations with convenient access to the third-level colleges (particularly by foot, bicycle and public transport), in a manner compatible with surrounding residential amenities. P-ST-HOU-2 Apply the Guidelines on Residential Developments for Third Level Students (Department of Education and Science, 1999) to all planning applications for student accommodation, particularly in relation to location and design. P-ST-HOU-3 Promote the provision of adequate accommodation for students with disabilities. P-ST-HOU-4 Monitor the need for the reservation of additional lands for student accommodation.	A1 M2		B1 B2 B3 HH1 W1 W2 W3 W4 W5 M1 CH1 CH2 L1			
<b>Voluntary and cooperative housing policies</b>						
B-VC-HOU-1 Assist voluntary and non-profit cooperative housing associations in the provision of housing and encourage a more active involvement of these sectors in the housing market.			B1 B2 B3 HH1 W1 W2 W3 W4 W5 A1 M1 M2 CH1 CH2 L1			



<b>Special-needs housing policies</b>						
<p>P-SN-HOU-1 Continue to support independent living for older people and the provision of specific, purpose-built accommodation.</p> <p>P-SN-HOU-2 Continue to meet the housing needs of persons with special needs both by direct provision of accommodation and by facilitating the provision of housing by the voluntary sector and the HSE.</p> <p>P-SN-HOU-3 Continue to implement the following grant schemes: Housing Adaption Grant for People with Disability, Mobility Aids Grant and Housing Aid for Older People Scheme.</p> <p>P-SN-HOU-4 Promote a partnership approach between the HSE, disability interest groups, voluntary housing associations and the local authority in meeting the particular needs of people with disabilities and the elderly.</p> <p>P-SN-HOU-5 Facilitate the provision of suitable accommodation for the homeless and for those in need of emergency accommodation.</p> <p>P-SN-HOU-6 Implement the provisions of DoEHLG's Homeless Strategy 2008–2013.</p> <p>P-SN-HOU-7 Ensure that housing developments accommodating the elderly, the disabled and the households least likely to own cars have easy and convenient access to local facilities and to public transport.</p> <p>P-SN-HOU-8 Support proposals for the provision of sheltered housing, and work with the various bodies and organisations responsible for the provision of this type of accommodation.</p>			<p>B1 B2 B3 HH1 W1 W2 W3 W4 W5 A1 M1 M2 CH1 CH2 L1</p>			
<b>Special-needs housing objectives</b>						
<p>O-SN-HOU-1 Prepare and implement an updated Homeless Action Plan.</p>				✓		

## 8.8 Chapter 8: Community Facilities

	Likely to <b>Improve</b> status of SEOs	Probable <b>Conflict</b> with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	Uncertain interaction with status of SEOs	<b>Neutral</b> interaction with status of SEOs	<b>No Likely</b> interaction with status of SEOs
<b>Community facilities – general policies</b>						
<p>GP-CF-1 Assist as far as possible in the provision of community facilities by reserving suitably-located land, by assisting in the provision of finance for their development (where appropriate and if resources are available), and/or by the use of the development management process to ensure provision is made for such facilities as the Councils consider appropriate.</p> <p>GP-CF-2 Encourage high standards in the design and finish of community facilities.</p> <p>GP-CF-3 Continue to apply development levies to provide for recreational and community facilities relating to new developments</p> <p>GP-CF-4 Optimise existing and proposed physical resources and infrastructure by supporting multi-functional building use and provision.</p>	<p>CH2 A1 M2</p>					

<p>GP-CF-5 Recognise the importance of community participation in the improvement of existing community and recreational facilities, and encourage increased involvement of local groups, both independently and in association with the relevant statutory bodies, in the future provision of such facilities.</p> <p>GP-CF-6 Encourage the siting of community facilities in suitable locations, especially within large residential / neighbourhood areas, or in close proximity to existing facilities / services and public transport routes.</p> <p>GP-CF-7 Work with relevant agencies in identifying areas for the provision of quality social infrastructure.</p> <p>GP-CF-8 Promote social inclusion by exploring ways to integrate minority groups into the community and by supporting the development of fully-integrated communities, catering for people of different ages and incomes.</p> <p>GP-CF-9 Encourage the establishment of specific bodies and programmes to facilitate the integration of those with special needs, and people of all age groups.</p>						
<p><b>Education facilities policies</b></p>						
<p>P-CF-ED-1 Support the provision of additional land for educational uses through the consideration (on suitable sites) of such facilities in a wide variety of land-use zoning categories, in particular lands zoned for community facilities, mixed uses and residential development.</p> <p>P-CF-ED-2 Promote the location of new schools close to areas with significant population or where residential expansion is proposed, and preferably near community facilities (such as community centres, playing fields and libraries) and public transport services.</p> <p>P-CF-ED-3 Support the educational institutions in their plans to expand and develop, in particular the Institute of Technology and its potential development towards university status.</p> <p>P-CF-ED-4 Promote the development of facilities connected with outreach programmes between businesses and the third-level institutions (e.g. Business Innovation Centre at Sligo IT), whereby Sligo can develop as a centre for excellence in research and development.</p> <p>P-CF-ED-5 Encourage and support the development of further educational facilities and training programmes to ensure a suitably skilled local workforce, including those for children and adults with special needs.</p> <p>P-CF-ED-6 Encourage facilities connected with the integration of those with special needs into the education system of streamlined schools.</p> <p>P-CF-ED-7 Support Sligo's schools in the upgrading and modernisation of their building stock so as to ensure that these institutions can accommodate the anticipated population growth.</p> <p>P-CF-ED-8 Ensure that appropriate infrastructure is provided concurrent with the development of an educational facility. Such infrastructure may include footpaths, pedestrian crossings, cycle lanes, parking facilities, ramps and facilities for those with special needs.</p>	<p><b>A1 M2</b></p>		<p><b>W5</b></p>			

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<b>Healthcare, social and crisis facilities policies</b>						
<p>P-CF-HSC-1 Support health service provision for people with learning disabilities and special needs.</p> <p>P-CF-HSC-2 Encourage the integration of health services and facilities with new and existing community facilities, where feasible.</p> <p>P-CF-HSC-3 Promote the location of health services and care facilities on sites convenient for pedestrian access and public transport.</p> <p>P-CF-HSC-4 Facilitate the needs of Sligo Social Services and DVAS, particularly in relation to the development of emergency accommodation for homeless people and victims of domestic violence.</p> <p>P-CF-HSC-5 Support existing health-care facilities in their plans to develop and expand.</p>	A1 M2					
<b>Facilities for older people - policies</b>						
<p>P-CF-OP-1 Facilitate further development in the area of health and social care facilities for older people.</p> <p>P-CF-OP-2 Support community groups who cater for the needs of older people, where appropriate and feasible.</p>						✓
<b>Childcare policies</b>						
<p>P-CF-CC-1 Work with the Sligo County Childcare Committee in the implementation of the Strategic Plan 2007–2010 and successor documents in the City and Environs area.</p> <p>P-CF-CC-2 Consider childcare needs in future local area plans and residential development proposals.</p> <p>P-CF-CC-3 Encourage the establishment of appropriate childcare facilities in suitable locations, such as neighbourhood centres, areas of concentrated employment, in the vicinity of schools, adjacent to public transport corridors and /or pedestrian areas, and in larger new housing estates.</p> <p>P-CF-CC-4 Have regard to the DoEHLG's Childcare Facilities – Guidelines for Planning Authorities (2001). In applying standards regarding the provision of childcare facilities in larger residential developments, the Planning Authorities will show flexibility by considering the provision of multi-purpose community facilities in certain cases, as appropriate.</p> <p>P-CF-CC-5 Support proposals that provide an improved variety of childcare services (both in terms of childcare providers, i.e. private / community, and childcare type, i.e. sessional services / full-day care), having particular regard to the deficits identified in the SCCC Strategic Plan 2007–2010.</p>	A1 M2					
<b>Community development policies</b>						
<p>P-CF-CD-1 Facilitate and assist, where possible, social and community development in Sligo City and Environs.</p> <p>P-CF-CD-2 Encourage a partnership approach between local community groups, statutory bodies and other organisations in the identification, provision and maintenance of community facilities, such as community centres and related indoor/outdoor recreational facilities.</p>				✓		
<b>Burial ground policy</b>						
<p>P-CF-BG-1 Encourage sustainable use of burial ground lands, including the consideration of alternatives to burial and innovative burial ground layout and design.</p>						✓
<b>Burial grounds objective</b>						
<p>OP-CF-BG-1 Reserve lands for cemetery expansion to the north-east of Sligo Cemetery.</p>						✓



Community facilities objective						
Objective O-CF-1 Reserve a site at Carrowroe for the construction of a private hospital, respite home, GP unit, consultants' suites and ancillary facilities.			B2 B3 HH1 S1 W1 W2 W3 W4 W5 M1 CH1 CH2 L1			

## 8.9 Chapter 9: The Value of Culture in Place-Making

	Likely to <u>Improve</u> status of SEOs	Probable <u>Conflict</u> with status of SEOs- unlikely to be mitigated	Potential <u>Conflict</u> with status of SEOs- likely to be mitigated	Uncertain interaction with status of SEOs	<u>Neutral</u> interaction with status of SEOs	<u>No Likely</u> interaction with status of SEOs
Cultural development policies						
<p>P-CD-1 Identify cultural and/or heritage clusters and ensure the provision of appropriate linking infrastructure, including signage, pedestrian routes and heritage trails, to ensure that cultural and heritage buildings are linked to one another and to the wider public realm as part of a coherent spatial structure.</p> <p>P-CD-2 Ensure a high-quality public domain in the vicinity of cultural and heritage buildings and, where possible, ensure that such buildings are linked to public spaces and to the wider open space network. A priority of this plan will be to support the development of high-quality, imaginative solutions to public space linkages for Forthill Park, the Green Fort and the area of the Civic Space.</p> <p>P-CD-3 Recognise the unique role of the city centre in providing a focus for the performing arts, including drama and music, and the extent to which these contribute to the vitality of the city centre. To this end, Sligo Borough Council will encourage and facilitate the development and retention of high-quality cultural amenities. Priorities of this plan include the redevelopment of The Model Niland as a contemporary art centre with a dedicated gallery for showcasing the Niland Collection. The space will also include the proposed new state of the art Museum and Civic Space which is intended to link the gallery and the museum and comprise a mix of housing and commercial activity. The buzz of creativity, innovation and entrepreneurialism generated by the clustering of cultural production and consumption in the Greenfort area will make Sligo a more attractive place for city living.</p> <p>P-CD-4 Ensure that all of the city's residents have access to cultural amenities including the arts, theatre and music. Sligo Borough Council will actively encourage and support the provision of local arts initiatives in the four wards of Sligo city.</p> <p>P-CD-5 Add to the cultural diversity of the city by facilitating the provision of new spaces for artists to live, work and exhibit. In particular, support the regeneration of Sligo's Docklands area through the provision of a cultural landmark building and the innovative reuse of former industrial buildings located in the area for workspace for creative enterprises and new community uses.</p> <p>P-CD-6 Promote the provision of public art, including temporary art and sculpture, through such mechanisms as the government-supported Percent for Art scheme and the development management process.</p>	CH1 CH2 S1 A1 M2		CH1			

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<p>P-CD-7 Promote the exhibition of sculpture and other works of art in parks, open spaces and other focal points in the city.</p> <p>P-CD-8 Facilitate street theatre and outdoor performance through the development or enhancement of appropriate public spaces with the necessary lighting, cabling, sufficient wall space for outdoor projection, surfaces etc.</p> <p>P-CD-9 Meet the cultural needs of disabled and mobility-impaired persons.</p> <p>P-CD-10 Identify areas around the city where carnivals, circuses etc. can perform on an annual basis, thus adding variety and colour to the local area.</p>						
<b>Cultural development objectives</b>						
<p>O-CD-1 Examine, in conjunction with the Arts Council and other relevant bodies, the feasibility of: - establishing live-work units and work spaces for artists; - establishing a number of shared storage and rehearsal spaces for theatre, film, music and the visual arts in low-cost locations.</p> <p>O-CD-2 Provide a pedestrian trail along the north and south banks of the Garavogue and Lough Gill as part of an overall linear park system.</p> <p>O-CD-3 Explore the possible provision of a heritage trail in the City and Environs that might include such features as the St. John's Cathedral, the Courthouse, the City Hall, Old Market Street, the Abbey, Forthill, the Famine Graveyard and the archaeological monuments of Carrowmore.</p> <p>O-CD-4 Promote the development of a venue building and/or concert hall in the Docklands that could be used for a variety of live entertainment, music concerts, recitals, drama, comedy and dance, including events such as the Sligo Choral Festival. The development of such a facility could be provided as part of a public-private partnership project.</p> <p>O-CD-5 Improve and enhance access to Carrowmore Passage Tomb Cemetery by means of road improvements and co-ordinated signage from city centre and main approaches.</p>	<b>A1 M2 B3</b>		<b>B1 B2 B3 CH1 L1</b>			

## 8.10 Chapter 10: Mobility - Effective Transport and Movement

	Likely to <b>Improve</b> status of SEOs	Probable <b>Conflict</b> with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	Uncertain interaction with status of SEOs	<b>Neutral</b> interaction with status of SEOs	<b>No Likely</b> interaction with status of SEOs
<b>Mobility - Strategic policies</b>						
<p>SP-MOB-1 Create an integrated and environmentally-sound transport system, in particular with regard to accessibility and choice of transport.</p> <p>SP-MOB-2 Integrate transportation planning and land-use planning in order to reduce the need to travel (especially by car), by promoting higher-density development and a sustainable mix of uses.</p> <p>SP-MOB-3 Make optimal use of existing transportation infrastructure by traffic management in order to reduce travel times and congestion.</p> <p>SP-MOB-4 Encourage the shift from car use to more environmentally- friendly modes of transport and ensure the provision of quality interchange facilities between road, rail, bus and bicycle.</p> <p>SP-MOB-5 Integrate the public transportation system with a quality intercity bus and rail service, alongside the promotion of cycle facilities and pedestrian movements.</p> <p>SP-MOB-6 Plan for the future traffic and transportation needs in Sligo.</p> <p>SP-MOB-7 Protect the historic city centre from the impact of traffic congestion.</p> <p>SP-MOB-8 Continue to develop a network of strategic and intra-urban roads in the Sligo and Environs area.</p> <p>SP-MOB-9 Facilitate and encourage the provision of adequate car-parking facilities in the Sligo and Environs area.</p> <p>SP-MOB-10 Protect the carrying capacity, operational efficiency and safety of national roads by ensuring that development proposals accessing onto the N4, N15 and N16 are restricted in accordance with the National Roads Authority's publication Policy Statement on Development Management and Access to National Roads.</p>	<b>A1 M2</b>		<b>B1 B2 B3 W5 CH1 L1</b>			
<b>Mobility – strategic objectives</b>						
<p>SO-MOB-1 Implement the relevant policies in relation to sustainable transport and in particular the Department of Transport's policy document Smarter Travel – A Sustainable Transport Future, A New Transport Policy for Ireland 2009–2020.</p> <p>SO-MOB-2 Implement the recommendations of the traffic study being undertaken for Sligo City and Environs.</p> <p>SO-MOB-3 Develop a strategy to promote and facilitate greater use of sustainable modes of travel such as walking and cycling, in line with the Department of Transport's Smarter Travel and Cycle Strategies.</p>				✓		



Strategic road objectives						
<p>It is an objective of the Local Authorities to:</p> <p>T1 Reserve strategic road corridors for the development of the following roads:</p> <p>T1.1 Upgrade and realignment of the N4/N15, from Hughes Bridge to Sligo/Leitrim County boundary, including the upgrading of the N16 from the N4/N15 junction to Duck Street roundabout on the N16.</p> <p>T1.2 Western Distributor Road from the Caltragh Interchange on the Inner Relief Road, through Ballydoogan, to the Strandhill Road.</p> <p>T1.4 Realignment of the N16 Enniskillen Road, from the County boundary to Teesan/Ballinvoher, to connect with the existing N15 / Objective T.1.1</p> <p>T1.5 A strategic route option for a City Bypass linking N4 at Carrowroe with the realigned N15 and N16, north of the City. A route selection study will be prepared and a recommendation will be made on the optimal route and alignment.</p> <p>T1.5.a Sligo City requires a Western Bypass to enable traffic not wishing to access the city to pass with ease from North to South and vice versa. A modern well planned bypass will augment Sligo's infrastructure and attractiveness for inward investment allowing it to fulfil its potential as a Gateway City. By constructing an outer ring road west of the Second Sea Road this will help facilitate expansion westwards while protecting the residential amenity of the area. By selecting a route as expeditiously as possible Sligo will then be positioned in an economic upturn to take advantage of forward minded planning through its new SEDP. Following the statutory period of public consultation the following has been agreed to in the determination of the Western/City Bypass route:</p> <ul style="list-style-type: none"> <li>It is considered that the central theme of the objections raised in relation to the proposed variation number 6 of the SEDP to the effect that the impact on the residents both present and future of the area between the two Sea Roads would be disproportionate to the overall goal and aim sought to be achieved by the construction of the Western/City Bypass. To locate the Western/City Bypass in an area between the two Sea Roads would not be consistent with the proper planning and sustainable development in the area. Therefore, the Western/City Bypass should be located west of the second Sea Road with a view to ensuring that the accepted negative impact on those people living between the two Sea Roads be prevented.</li> <li>It is recognised that to locate the Western/City Bypass or road intersection in an area between the two Sea roads (already serviced and zoned residential) would be considered to be unreasonable in all the circumstances and in particular to the detrimental planning affects on the long established residents in the area. Therefore, as part of an environmental impact assessment of the Western/City Bypass this will not consider that area between the two Sea roads as it is accepted that it is not a suitable alternative. The integrity of the area bound by the two Sea Roads as a residential zone is to be preserved and enshrined in the SEDP 2010-2016 development plan and all future development plans. Further investigation of a proposed Western/City Bypass will continue and will be completed no later than June 2009.</li> <li>By adopting a route further west this will bring a better quality of life for residents of Sligo and in particular the successful residential strategy that has been incorporated by Sligo Borough Council with the provision of private and local authority housing.</li> </ul> <p>It will reduce congestion and sustain strong communities in a fully serviced locality with beautiful amenities. It will reduce inter-urban journey times and thereby promote a well balanced economic structure in the region and county. This would improve infrastructure, access and proximity to Sligo Regional Airport. A route further west would reduce traffic levels close to the city and thereby improve air quality and noise levels in high density residential areas.</p> <p>Addendum: That the City Bypass should be located elsewhere with a view to ensuring that the accepted negative impact on those people living west of the First Sea Road be prevented and the proposed route west of the Second Sea Road starting at</p>			<p><b>B1 B2 B3 W5 CH1 L1</b></p>	<p>✓</p>		

<p>the Carraroe interchange in the townland of Tonafores, via Oakfield, Ballydoogan, Barnasrahy, Woodville Farm and the whole townland of Cummeen, via Gibraltar and Finisklin should not be adopted. It is accepted that the natural amenity of Gibraltar, the Special Area of Conservation at Cummeen, Carrowmore Megalithic Cemetery, the Ceremonial Enclosure RMP No Slo 14-052 CMC and the integrity of Woodville Farm should be protected for the people of Sligo and the proposed route west of the Second Sea Road should not be adopted.</p> <p>T1.6 Inner Relief Road Corridor – upgrade junctions at John Street, Ted Nealon Street, Lord Edward Street, Lynns Place and Hughes Bridge, including the provision of additional approach lanes and filter lanes, to improve access to the city centre and reduce delays to west-east traffic.</p> <p><i>Note: All proposed road lines shown on the Transportation Objectives Map are indicative corridors only, and shall be subject to further constraints studies and route selection assessments.</i></p>						
<b>Policies for roads crossing Natura 2000 sites</b>						
<p>P-N2000-1 Demonstrate the need for the project in light of a “do nothing” context.</p> <p>P-N2000-2 Examine the potential for intensifying or upgrading existing roads and routes as an alternative to carrying out new road development affecting a Natura 2000 site.</p> <p>P-N2000-3 Develop and evaluate a comprehensive series of plausible alternative routes and design strategies (the latter to include long span and tunnel options).</p> <p>P-N2000-4 Demonstrate how each route has taken due account of, and accommodated ecological considerations and legislative requirements.</p> <p>P-N2000-5 Demonstrate that the chosen route will not cause any incursions onto or significant adverse effects on habitats in Natura 2000 sites.</p>	<p><b>B1 B2 B3 HH1 W1 W2 W3 L1</b></p>					
<b>Intra-urban roads objectives</b>						
<p>T2 Reserve a number of intra-urban road links for the following routes:</p> <p>T2.1 A link road from objective T1.3 northwards to connect with the existing N16 at Yeats Heights/Abbot Roundabout.</p> <p>T2.2 A north-south route from Tonafores / Ballyfree northwards to the Summerhill Roundabout.</p> <p>T2.3 From Sea View Drive (Cartron Village) on R291 to the junction with N15 at Shannon Eighter/Cartron.</p> <p>T2.4 From the roundabout on First Sea Road, north to junction with Second Sea Road (L-75011-0), via L-75012-0 (north end of First Sea Road); Second Sea Road (L-25011-0), south-west of Gibraltar Point, east to the Borough Boundary at Finisklin.</p> <p>T2.5 Continue the realignment, widening and upgrading of Hazelwood Road (R286).</p> <p>T2.6 From Pearse Road (R287) adjacent to the proposed Neighbourhood Centre at Cornageeha (in the vicinity of Sligo Park Hotel) to Newtownholmes Road.</p> <p>T2.8 From N15 at its junction with T2.3 eastwards to connect with existing N16 at Yeats Heights / Abbott roundabout, except for the section crossing Woodlands/Glendallon housing estate.</p> <p>T2.9 A north-south link road from R287 (Carrowroe to Aghamore), north to connect with Road Objective T2.11 at Tullynagracken North.</p>	<p><b>B1 B2 B3 W5 CH1 L1</b></p>		✓			

<p>T2.10 From the Yeats Heights/Abbott roundabout, east and north along the existing N16 to the Doonally junction (L-3407-22).</p> <p>T2.12 A link road from the junction of Burton Street/Pearse Road to the junction of Mail Coach Road/Connolly Street.</p> <p>T2.13 Realign, widen and upgrade Rathbraughan Road (L-3410-0, L-7421-0 and L-7422-0) from N15 to Ballytivnan Road.</p> <p>T2.14 Realign, widen and upgrade The Line (L-7422-0) from the junction with Rathbraughan Road (L-7421-0), east to N16, via L-3407-0.</p> <p>T2.15 Realign, widen and upgrade L-7421-0 at Shannon Eighter from junction with L-3410-0 (Rathbraughan Road) north to L-3407-0 at Carncash.</p> <p>T2.16 Provide the North Fringe Avenue from the N15 at Lisnalgur eastwards to the N16 at Shannon Oughter.</p> <p>T2.17 Upgrade and realign Flynn's Terrace to provide a direct link from Temple Street to the Inner Relief Road (Ray MacSharry Road).</p> <p>T2.18 Construct a crossing of the Garavogue estuary at Finisklin/Rathedmond to connect to the N15 and N16 junction at Duck Street south of Cartron.</p> <p>T2.19 R287 from Carrowroe Roundabout north to Retail Park Roundabout – upgrade to a four-lane carriageway with central median.</p> <p>T2.20 Provide a Western Docklands access road.</p> <p>T2.21 Provide an additional Western Docklands access road</p> <p><i>Note: All proposed road lines shown on Transportation Objectives Map are indicative corridors only, and shall be subject to further constraints and route selection assessment.</i></p>						
<b>Road improvement objectives</b>						
<p>T3 Upgrade the following urban roads:</p> <p>T3.1 Finisklin Road and Far Finisklin from the Inner Relief Road to the Borough Boundary (continue upgrading)</p> <p>T3.2 Ballast Quay</p> <p>T3.3 Sea Road and First Sea Road (L-75012-0) from its junction with R292 Strandhill Road north to the roundabout</p> <p>T3.4 Second Sea Road (L-75011) from its junction with R292 Strandhill Road to the bend before Gibraltar Point</p> <p>T3.5 R292 Lord Edward Street/Knappagh Road/Strandhill Road (realign, widen and upgrade)</p> <p>T3.6 Oakfield Road and L36011-0 (county area) (realign, widen and upgrade)</p> <p>T3.7 Ballydoogan Road (realign, widen and upgrade)</p> <p>T3.8 Circular Road (realign, widen and upgrade)</p> <p>T3.10 Cairns Road and L-3602-0 (county area) (realign, widen and upgrade)</p>			<p><b>B1 B2 B3 W5 CH1 L1</b></p>	<p><b>A1 M2</b></p>		



<p>T3.11.a Newtownholmes Road north of IRR (continue to realign, widen and upgrade)</p> <p>T3.11.b Newtownholmes Road and L-7601-0 (county area) south of IRR (continue to realign, widen and upgrade) including the realigned Newtownholmes Road to the west of Sligo Inner Relief Road and connecting with Caltragh Interchange</p> <p>T3.12 Clarion Road (continue to realign, widen and upgrade)</p> <p>T3.13 Cemetery Road (continue to realign, widen and upgrade)</p> <p>T3.14 Shannon Eighter (Scotsman Walk) from R291 to the N15 road corridor (realign, widen and upgrade)</p> <p>T3.15 Tonaphubble Road and L-36025 (county area) (realign, widen and upgrade)</p> <p>T3.16 Cleveragh Road (realign, widen and upgrade)</p> <p>T3.17 R291 Rosses Point Road (realign, widen and upgrade)</p> <p>T3.18 Adelaide Street (widen, increase capacity and reduce delays at the junction of Adelaide Street/John Street, Ted Nealon Road and Wine Street/ Lord Edward Street)</p>						
<b>Pedestrian priority objectives</b>						
<p>O-PED-1 Pedestrianise O'Connell Street when the necessary funding to cover the costs of the pedestrianisation and enhancement of the street is provided by Government or other sources, and when the Borough Council by resolution deems it appropriate.</p> <p>O-PED-2 Continue the pedestrian prioritisation and environmental improvements of the City Centre to include Castle Street, Grattan Street, Market Street, High street and John Street, when funding becomes available and when the Borough Council by resolution deems it appropriate.</p> <p>O-PED-3 Facilitate the provision of a waterfront walk from Kempton Promenade (Brewery Lane) to the J. Fallon footbridge.</p> <p>O-PED-4 Require the construction of a waterfront walk along the river from Hyde Bridge to Hughes Bridge on the western side (any redevelopment of existing premises in this vicinity will be required to reserve space for such a walkway).</p> <p>O-PED-5 Ensure the provision of a pedestrian link between Connaughton Road area and the Stephen Street/The Mall, as part of any redevelopment of the urban blocks bound by these streets</p> <p>O-PED-6 Encourage the provision of an additional pedestrian link between the Mall and the River Garavogue, approximately mid-way between Bridge Street and River Lane.</p> <p>O-PED-7 Facilitate the provision of a dedicated pedestrian and cycle bridge linking Cleveragh to Hazelwood</p> <p>O-PED-8 Provide a pedestrian and cycle bridge or boardwalk on the east side of Markiewicz Bridge, linking Bridge Street to Thomas Street at Kempton Parade/JFK Parade.</p> <p>O-PED-9 Encourage the provision of a pedestrian and cycle bridge over the IRR linking the Train Station to the proposed Adelaide Square.</p>	<b>A1 M2</b>		<b>B3</b>			

<b>Policies for city centre traffic management</b>						
<p>P-CC-TM-1 Discourage through traffic from penetrating the city centre, by adopting a circulatory system that directs traffic around the centre on a "ring route", providing multi-storey car parks on the edge of the centre.</p> <p>P-CC-TM-2 Pedestrianise or improve the pedestrian environment and give cycling priority to streets within the centre, restricting on-street car parking and undertaking environmental enhancements.</p> <p>P-CC-TM-3 Reduce traffic flows in the city centre and introduce traffic calming (shared priority) on main city centre streets including Castle Street, Grattan Street, John Street, Market Street and High Street.</p> <p>P-CC-TM-4 Encourage north-south traffic to use the Sligo Inner Relief Road.</p> <p>P-CC-TM-5 Encourage the development of new pedestrian routes across the city centre and facilitate these with appropriate pedestrian crossings.</p> <p>P-CC-TM-6 Encourage the provision of and facilitate access to new multi-storey car parks adjoining the circular/ring route.</p> <p>P-CC-TM-7 Ensure that all new traffic management measures include, as far as possible, improved facilities for pedestrians, cyclists and for vulnerable road users.</p> <p>P-CC-TM-8 Establish and protect public rights of way.</p>	<b>A1 M2</b>		<b>B1 B2 B3 W5 CH1 CH2 L1</b>			
<b>Objectives for city centre traffic management</b>						
<p>O-CC-TM-1 Continuously monitor traffic flows and modify flow patterns, as necessary, to improve overall traffic flows. This may involve the introduction of one-way systems, flow reversals, traffic calming schemes, improved signage etc.</p> <p>O-CC-TM-2 Improve traffic flows at interchanges between the Inner Relief Road and the City Centre (including west to east traffic) especially at the five major city-centre junctions along Sligo Inner Relief Road i.e. John Street, Dunnes Stores, Lord Edward Street, Lynns Place and Hughes Bridge.</p>				<b>A1 M2</b>		
<b>Car parking policies</b>						
<p>P-CP-1 Adopt car parking management standards within the city centre that reduce on-street car parking in favour of off-street parking and impose a restriction on long term parking (i.e., commuter) facilities in favour of short-term (business, retail and leisure) parking.</p> <p>P-CP-2 Restrict parking facilities to locations on the immediate edge of the city centre, with access from, or just outside the circular/ring route.</p> <p>P-CP-3 Ensure a spatially-balanced provision of car parking, to help sustain existing businesses and encourage new developments in each quarter of the city centre</p> <p>P-CP-4 Require all individual developments to provide for their own parking demands within their sites, where practicable.</p> <p>P-CP-5 Encourage the development and operation of multi-storey car parks at suitable locations by the private sector.</p>			<b>CH1 CH2 L1</b>			

<b>Car parking objectives</b>						
<p>O-CP-1 Encourage the provision of multi-storey/underground car parks at the following strategic locations:</p> <ul style="list-style-type: none"> <li>a) Connaughton Road: catering for approximately 800-850 spaces, serving traffic coming into the city from the north and east.</li> <li>b) Quayside/Quay Quarter: expanding on the existing 375 spaces provided with possible capacity for 700 spaces, serving those coming from the north.</li> <li>c) Railway Station, west of IRR: serving traffic from the west.</li> <li>d) Wine Street Block: catering for approximately 1,000 cars, serving traffic primarily from the south.</li> <li>e) Lands between Market Yard and the Lungy: serving traffic primarily from the south.</li> <li>f) Abbey Street/Charlotte Street: serving traffic primarily from the south-east.</li> </ul> <p>O-CP-2 Encourage the provision of a multi-story car park west of the Inner Relief Road, with adequate pedestrian access to the city centre, to reduce predicted congestion along the Inner Relief Road and ultimately in the city centre.</p> <p>O-CP-3 Ensure that all spaces are adequately delineated and marked, as inefficient spacing between parked vehicles often means that fewer vehicles are able to park.</p> <p>O-CP-4 Continue the enforcement of car parking by-laws.</p> <p>O-CP-5 Expand the Telematics system on the approach roads to Sligo city centre.</p>			CH1 L1	CH2		
<b>Public transport policies</b>						
<p>P-PT-1 Strengthen Sligo's function as a transportation node in the North-West and facilitate an easy interchange between different transportation modes.</p> <p>P-PT-2 Continue to work with the service providers, such as Iarnrod Eireann and Bus Eireann, to reduce the need for car trips by improving the availability, reliability and quality of public transport.</p> <p>P-PT-3 Ensure that the design and layout of new developments facilitates circulation by foot, bicycle and public transport.</p> <p>P-PT-4 Support the reopening and development of the Western Rail Corridor.</p> <p>P-PT-5 Promote and facilitate the development of a commuter rail service to Sligo City using existing rail lines.</p> <p>P-PT-6 Encourage the maximization of freight transport by rail and through the port.</p>	A1 M2		B1 B2			
<b>Public transport objectives</b>						
<p>O-PT-1 Promote the redevelopment of the Railway Station and backlands in the vicinity as a major Transportation Hub with a multi-modal interchange, catering for rail, bus (local and regional), car parking, a bicycle station and other bicycle facilities.</p> <p>O-PT-2 Provide for bus parking for tour and coach operators on lands to the rear of the Railway Station. These lands shall be accessed from Finisklin Road/Lynn's Place, with pedestrian access only from Union Place/Inner Relief Road.</p> <p>O-PT-3 Reserve lands for a future transit stop at Oakfield, in the vicinity of the proposed new IDA Business Park and the mixed-use area at the southern end of the economic spine.</p> <p>O-PT-4 Examine the feasibility of a rail link between Sligo and Derry via Manorhamilton and Enniskillen, and the integration of such a rail link with new national road alignments and designs, i.e. N16 (Enniskillen Road).</p>	A1 M2					



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O-PT-5 Retain the rail infrastructure, including the Quay branch line and freight yard at Sligo Quay.						
<b>Taxi service objective</b>						
O-TX-1 Maintain taxi rank facilities at a central location within the city centre other locations to the east and west of it.						✓
<b>Park-and-ride objectives</b>						
O-PR-1 Identify sites for the provision of park-and ride-facilities. O-PR-2 Explore the provision of bus lanes on major access routes to the city centre.	A1 M2					
<b>Cycling policies</b>						
P-CY-1 Promote cycling as a mode of travel and implement relevant national policy in relation to cycling, including the Department of Transport's National Cycle Policy Framework 2009 – 2020. P-CY-2 Facilitate a network of safe and convenient cycle routes throughout the City and Environs, linking key institutional, educational, cultural, recreational and retail areas. P-CY-3 Ensure that where environmental improvements, traffic calming or road closures are being introduced to a street, there is consideration for the movement of bicycles. P-CY-4 Require that all new developments are designed to integrate into a cycling network linking with adjoining development areas. P-CY-5 Ensure that adequate cycle facilities are provided in all new institutions, employment centres, sports complexes and leisure facilities, in the form of sheltered bicycle parking and locker rooms with shower facilities.	A1 M2					
<b>Cycling objectives</b>						
O-CY-1 Prepare a Cycling Strategy for Sligo with specific targets to develop a cycling network within and throughout Sligo, including bicycle parking, and to promote cycling as an alternative mode of transport. O-CY-2 Provide, improve and extend cycle routes on all proposed roads, roads being upgraded and green corridors O-CY-3 Provide bicycle parking facilities at all car parks. O-CY-4 Provide bicycle parking facilities in the city centre and at key institutional, educational, cultural, recreational and retail areas and at the Railway Station.	A1 M2					

## 8.11 Chapter 11: Open Space, Sports and Recreation

	Likely to <b>Improve</b> status of SEOs	Probable <b>Conflict</b> with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	Uncertain interaction with status of SEOs	<b>Neutral</b> interaction with status of SEOs	<b>No Likely</b> interaction with status of SEOs
<b>Strategic Open Space Policies</b>						
<p>SP-OS-1 Establish Sligo as a premier green city of Ireland.</p> <p>SP-OS-2 Protect and enhance the existing green areas and public open spaces, sports grounds, natural and semi-natural amenity areas, and provide high-quality new parks and recreational facilities to cater for the needs of the Gateway population.</p> <p>SP-OS-3 Seek the protection and enhancement of valuable parks and gardens in private/institutional ownership that have traditionally been accessible to the public.</p> <p>SP-OS-4 Develop green corridors in order to connect the city with its surroundings and interlink the various types of open space within and outside the urban area.</p> <p>SP-OS-5 Extend the range of recreational facilities provided within parks and other types of open space throughout the Plan area, subject to adequate protection of the environment.</p> <p>SP-OS-6 Manage and maintain open space in public ownership to the highest standards.</p>	<b>B1 B2 B3 L1 A1 M2</b>					
<b>Strategic Open Space Objectives</b>						
<p>SO-OS-1 Provide an interconnected system of quality parks, open spaces and outdoor recreation areas to enable a wide range of passive and active recreational pursuits within easy reach of people's living and working environment.</p> <p>SO-OS-2 Integrate the following elements into the open space network, to provide ease of contact with nature:</p> <ul style="list-style-type: none"> <li>• key landscape elements – woodlands, significant tree groups, hill tops, etc.;</li> <li>• sites of archaeological interest – raths, ringforts and other enclosures;</li> <li>• linear parks incorporating waterfronts – coastal, lakeshore and riverside areas;</li> <li>• streams with associated storm water retention facilities, as part of the system of linear parks,;</li> <li>• areas for active recreation, including sports grounds/playing fields.</li> </ul>	<b>B3 L1 A1 M2 CH1</b>					
<b>General open space policies</b>						
<p>P-OS-1 Ensure that open space in new developments is provided in a meaningful, integrated and coherent manner, and generally discourage piecemeal and incidental open spaces.</p> <p>P-OS-2 Protect and improve existing areas of public open space. There will be a presumption against development on public open spaces within housing estates. In exceptional circumstances, development on public open space may be considered where the public open space is not functioning effectively due to scale, location, layout or where there is some significant community gain from its development for other purposes.</p>	<b>B1 B2 B3 L1 A1 M2</b>					

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<p>P-OS-3 Promote the provision of high-quality open spaces that are well designed, suitably proportioned and accessible to the surrounding community.</p> <p>P-OS-4 Promote the development of high-quality parks and linked walkway/cycleway networks within large housing schemes, dockland developments, and large commercial developments.</p> <p>P-OS-5 Encourage multiple use of sports grounds within existing facilities on evenings and weekends and act in a leadership role to mediate between the range of groups in order to encourage a partnership involvement in providing broad ranging amenity and recreation programmes.</p> <p>P-OS-6 Facilitate the development of children's playgrounds in proximity to existing and proposed neighbourhood centres.</p> <p>P-OS-7 Require the implementation of landscape plans for all proposed open spaces within residential areas, except where playing fields are being provided and do not require landscaping.</p> <p>P-OS-8 Protect and enhance the character and appearance of coastal and waterway corridors through the control of development adjoining waterfronts, and enhance the value of river and coastal systems as natural assets to the urban environment.</p>						
<b>Recreation policies</b>						
<p>P-OS-9 Create a hierarchical network of parks in the SEDP area, varying from large regional parks to small pocket parks and open spaces close to people's homes.</p> <p>P-OS-10 Cater for the sporting/recreational needs of all sectors of the community (children, teenagers, adults, older people, the disabled, the disadvantaged or marginalised) and promote the integration of those with special needs into the sporting and recreational environment.</p> <p>P-OS-11 Ensure developers make provisions for sports and recreational infrastructure as integral elements of their development proposals.</p>	<b>B3 L1 A1 M2</b>					
<b>Walkway and cycleway policies</b>						
<p>P-OS-12 Provide a network of safe, accessible, high-quality amenity walkways / jogging trails / cycleways.</p> <p>P-OS-13 Signpost, name and brand amenity walkways / cycleways in order to highlight their availability and accessibility.</p>	<b>A1 M2</b>					
<b>Urban forestry and street tree planting policies</b>						
<p>P-OS-14 Promote the development of urban woodlands at Doorly Park / Cleveragh and other new sites suitable for the creation of small woodland areas.</p> <p>P-OS-15 Make Tree Preservation Orders where necessary.</p> <p>P-OS-16 Promote the planting of trees in parks, streets, squares and open space areas in housing estates.</p>	<b>B3 L1</b>					
<b>Open Space Objectives</b>						
<p>It is the objective of the local authorities to develop nine principal areas as part of the open space strategy:</p> <p>O-OS-1 South-east: Cleveragh–Doorly Park–Cairns Hill</p> <p>O-OS-2 West/South-west: Mitchell Curley Park–Ballydoogan</p> <p>O-OS-3 North: Forthill Park–Rathbraughan–Cartron–Standalone Point</p> <p>O-OS-4 North-east: Rathquarter–Ballinode–Hazelwood–Farranacardy</p> <p>O-OS-5 North: Shannon Oughter–North Fringe</p> <p>O-OS-6 West: Gibraltar/Cumeen–Finisklin/Docklands</p>	<b>B1 B2 B3 L1 A1 M1</b>					



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O-OS-7 South-west: Maugheraboy–Caltragh						
O-OS-8 South: Tullynagracken–Carraroe						
O-OS-9 Far South: Carrowroe–Belladrihid						
<b>Green Corridor Objectives</b>						
<p>It is an objective of the local authorities to develop a linked green network including the following corridors:</p> <p>O-OS-10 Cairns Hill to Carrowroe</p> <p>O-OS-11 Doorly Park to Holy Well</p> <p>O-OS-12 Hazelwood to Ballinode</p> <p>O-OS-13 Gibraltar to Finisklin</p> <p>O-OS-14 Oakfield to Carraroe</p> <p>O-OS-15 Markiewicz Road to Standalone Point corridor (along the foreshore at Cartron)</p> <p>O-OS-16 Bundoran Road/Ballytivnan along Rathbraughan River to Doonally Cross</p> <p>O-OS-17 Carrowroe to Belladrihid</p> <p>O-OS-18 Hyde Bridge to Hughes Bridge and Ballast Quay</p> <p>O-OS-19 Cleveragh River Way: Bridge Street to Hazelwood (northern Garavogue banks) and J Fallon footbridge to Cleveragh Park (southern river banks)</p> <p>O-OS-20 Along the stream at Duck Lane and Ash Lane to Ballinode and Hazelwood</p> <p>O-OS-21 Oakfield to First Sea Road along the Western Distributor road</p> <p>O-OS-22 First Sea Road to Second Sea Road</p> <p>O-OS-23 Oakfield Road to Summerhill Roundabout</p>	<b>B1 B2 B3 L1 A1 M1</b>					
<b>Playground objectives</b>						
<p>O-OS-24</p> <p>It is the objective of Sligo Borough and County Councils to develop and maintain a primary network of children's playgrounds at the following locations:</p> <ul style="list-style-type: none"> <li>• Mitchell Curley Park</li> <li>• Cleveragh Regional Park</li> <li>• Forthill Park</li> <li>• Doorly Park</li> <li>• Ballinode Park</li> <li>• North Fringe Park</li> <li>• Docklands area</li> </ul> <p>O-OS-25 It is the objective of Sligo Borough and County Councils to develop and maintain a secondary network of children's playgrounds at the following locations:</p> <ul style="list-style-type: none"> <li>• Acorn Park, Cranmore</li> <li>• Hillside Adventure Park, Forthill</li> <li>• Seaview Park</li> <li>• Ballytivnan Park</li> <li>• Cranmore Estate</li> <li>• Maugheraboy Park</li> <li>• Mail Coach Road, Fairgreen</li> <li>• Cathedral Park</li> <li>• Stephen Street Square</li> <li>• Cartron Estates</li> <li>• Caltragh</li> </ul>						✓

<b>Urban squares objectives</b>						
<p>It is the objective of Sligo Borough Council to:</p> <p>O-OS-26 Develop suitably landscaped urban squares at the following locations:</p> <ul style="list-style-type: none"> <li>Adelaide Square - in the vicinity of the Wine Street-Adelaide Street Junction</li> <li>Stephen Square - at Stephen Street car park</li> <li>Quay Square - at Quay Street car park</li> <li>Central Square - in the middle of the Centre Block</li> <li>Museum Square - in the Green Fort precinct off Connaughton Road</li> </ul> <p>O-OS-27 Develop the Cathedral Park (a.k.a. Peace Park) as a city centre park, maintaining the special character of this walled space, while facilitating the use of the central area for purposes such as open air performances.</p> <p>O-OS-28 Develop an urban square/pocket park of minimum 0.5ha as part of any redevelopment that would include the site of the former orchard associated with the Ursuline Convent.</p>	<b>CH2 B3</b>					

## 8.12 Chapter 12: Urban Design

	<b>Likely to Improve status of SEOs</b>	<b>Probable Conflict with status of SEOs- unlikely to be mitigated</b>	<b>Potential Conflict with status of SEOs- likely to be mitigated</b>	Uncertain interaction with status of SEOs	<b>Neutral</b> interaction with status of SEOs	<b>No Likely</b> interaction with status of SEOs
<b>Strategic policies for urban design</b>						
<p>SP-UD-1 Create a coherent urban structure, making the city more legible and pedestrian-friendly.</p> <p>SP-UD-2 Reinforce the diverse character of different parts of the city and ensure that new urban quarters develop their own identity.</p> <p>SP-UD-3 Protect the built heritage and create a contemporary fabric to co-exist in harmony with the old.</p> <p>SP-UD-4 Promote design excellence in the public realm.</p> <p>SP-UD-5 Create high-quality residential neighbourhoods.</p>	<b>CH2</b>					
<b>General City Centre policies</b>						
<p>GP-CC-1 Promote a vibrant mix of retail, service uses, employment uses, community and cultural facilities, natural features and civic buildings in the city centre.</p> <p>GP-CC-2 Improve the vitality of the city centre by encouraging a mix of upper-floor uses such as generously-sized apartments over shops.</p> <p>GP-CC-3 Encourage activities that enliven the evening economy, including culture and entertainment uses as well as late-night shopping.</p> <p>GP-CC-4 Discourage the provision of on-street car parking for new developments.</p>	<b>CH2 A1 M2 S1</b>		<b>CH1</b>			

<p>GP-CC-5 Restrict further introduction of fast-food outlets and betting shops in the commercial core and historic south-east area.</p> <p>GP-CC-6 Restrict further introduction of bars/night clubs in the areas of O'Connell Street and John Street.</p> <p>GP-CC-7 Ensure that refurbishment and redevelopment proposals contribute to the environmental quality and are in keeping with the character of the city centre.</p> <p>GP-CC-8 Restrict the provision of amusement arcades on the ground-floor frontage of city centre streets.</p> <p>GP-CC-9 Prevent the proliferation of fast-food outlets in any particular area within the city centre.</p> <p>GP-CC-10 Encourage the retention and use of residential accommodation on the upper floors of city centre properties.</p> <p>GP-CC-11 Promote the development of brownfield sites and the consolidation of the city centre.</p> <p>GP-CC-12 Require the installation of high-quality signage/shopfronts on commercial properties within the city centre and restrict the provision of internally illuminated signage.</p> <p>GP-CC-13 Restrict new uses which do not present an active frontage to the street in the commercial core of the city centre and the centre block area.</p> <p>GP-CC-14 Discourage the change of use of existing properties on the western half of Wine Street to retail use.</p>						
<b>Commercial Core urban design policies</b>						
<p>P-CC-CC-1 Promote the improvement of the public realm in the Commercial Core area.</p> <p>P-CC-CC-2 Promote uses on the ground floor of existing and proposed units which generate activity and contribute to the pedestrian realm.</p> <p>P-CC-CC-3 Require all proposals for new shopfronts/signage to be of high quality and consistent with the character of the area/building – in particular hand-painted signboards on traditional shopfronts or individual lettering on the modern shopfronts.</p>	<b>CH2</b>					
<b>Commercial Core urban design objectives</b>						
<p>O-CC-CC-1 Carry out environmental enhancement works to O'Connell Street, including the refurbishment of the pavement and the installation of new street furniture.</p>	<b>CH2</b>					
<b>Quay Quarter urban design policies</b>						
<p>P-CC-QQ-1 Implement the provisions of the Quay Quarter Urban Design Framework.</p> <p>P-CC-QQ-2 Facilitate the coordinated improvement of the public realm along the waterfront.</p> <p>P-CC-QQ-3 Require that all new buildings be designed to the highest standards in terms of elevations and layouts.</p>	<b>CH2</b>		<b>CH1</b>			
<b>Quay Quarter urban design objectives</b>						
<p>O-CC-QQ-1 Promote the construction of a multi-storey car park between Queen Stores Road and Custom House Lane.</p> <p>O-CC-QQ-2 Seek the reopening of the former Custom House Lane to facilitate the development of the area.</p> <p>O-CC-QQ-3 Redevelop the existing public surface car park as an urban square.</p>	<b>CH2 S1</b>		<b>CH1</b>			



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O-CC-QQ-4 Encourage the development of a landmark building on the corner of Queen Stores Road and Custom House Quay, which will signal the entrance into the City Core and the Quay Quarter.						
<b>River Banks urban design policies</b>						
P-CC-RB-1 Encourage the coordinated re-development of backlands and plots currently associated with the south side of The Mall, to create a new streetscape with a quasi-continuous building line, 3-4 storeys in height, with a minimum pedestrian pavement width of 8 metres from building edge to riverside boundary wall. P-CC-RB-2 Facilitate appropriate development that addresses the waterfront and encourages its public enjoyment along Rockwood Parade, JFK Parade and Kempton Promenade and in the environs of the existing Stephen Street Car-park.	CH2 S1		CH1			
<b>River Banks urban design objectives</b>						
O-CC-RB-1 Build a new weir in the Garavogue River at Hyde Bridge. O-CC-RB-2 Open up views from JFK Parade to the Abbey by creating a stronger visual and/or pedestrian link with the riverside through the existing single-storey buildings fronting onto JFK Parade. O-CC-RB-3 Promote the floodlighting of Sligo Abbey Tower.	CH2 L1		B1 B2 B3			
<b>Green Fort Precinct urban design policies</b>						
P-CC-GP-1 Promote and support the development of the Green Fort area as the main cultural destination within the city. P-CC-GP-2 Facilitate the coordinated development of lands within this area. P-CC-GP-3 Seek the creation of effective pedestrian linkages between the Green Fort Precinct and the city centre with its key tourist sites, particularly the Abbey. P-CC-GP-4 Develop Connaughton Road as an important street integrated within the city centre and encourage a mix of uses and a strong building line from the junction with Holborn Street to the junction with The Mall. P-CC-GP-5 Promote The Mall as an integral part of the Greenfort Precinct and carry out environmental enhancement works on this street as resources permit. P-CC-GP-6 Encourage the provision of pedestrian and restricted vehicular access between The Mall and the riverbanks directly south of The Mall.	CH2 A1 M2 S1		CH1			
<b>Green Fort Precinct urban design objectives</b>						
O-CC-GP-1 Facilitate the preparation of a comprehensive site development brief for the Green Fort area and ensure that all development occurs in the context of this brief. O-CC-GP-2 Require the provision of a well-designed, generously-sized pedestrian link between The Mall and the proposed Regional Museum – to be incorporated into the above-mentioned site development brief for the area. O-CC-GP-3 Promote the construction of a multi-storey/underground car park in this area.	CH2 A1 M2 S1		CH1			

<b>Centre Block urban design policies</b>						
P-CC-CB-1 Implement the provisions of the Centre Block Masterplan.	<b>CH2 A1 M2 S1</b>		<b>CH1</b>			
P-CC-CB-2 Facilitate and assist in the rational and orderly development as set out in the Masterplan by assisting in site assembly and, if appropriate in this regard, by the using the Council's powers of compulsory acquisition.						
Policy P-CC-CB-3 Promote uses on the ground floors of existing and proposed units which generate activity and contribute to the enhancement of the pedestrian realm.						
Policy P-CC-CB-4 Promote the high-quality redevelopment of existing properties located between Wine Street and the Centre Block.						
<b>Centre Block urban design objectives</b>						
O-CC-CB-1 Secure the creation of effective pedestrian linkages between the Bus and Train Stations and the City Centre, via the Centre Block development.	<b>A1 M2</b>					
<b>Historic South-East urban design policies</b>						
P-CC-HSE-1 Implement the provisions of the Courthouse Block Urban Design Framework.	<b>CH2 A1 M2 S1</b>		<b>CH1</b>			
P-CC-HSE-2 Promote the coordinated development of lands within the Courthouse Block.						
<b>Historic South-East urban design objectives</b>						
O-CC-HSE-1 Prepare a site development brief for the area defined by Abbey Street, Chapel Street and Charlotte Street, which will make provision for a multi-storey car park and the enhancement of the streets and amenities in the immediate surroundings.	<b>CH2</b>		<b>CH1</b>	✓		
<b>Urban squares - objectives</b>						
<i>Adelaide Square</i> O-CC-AS-1 Promote and facilitate the development of Adelaide Square in the vicinity of the Wine Street-Adelaide Street Junction, as a new civic space and gateway to the city centre.	<b>B3 A1 M2 CH2</b>		<b>CH1</b>			
O-CC-AS-2 Ensure that any developments along Adelaide Street (including road widening or the provision of new building lines) incorporate a widened pavement so as to encourage pedestrian linkage from the proposed civic square to the entrance of the centre-block.						
O-CC-AS-3 Ensure the framing of the square by either existing or new buildings of sufficient heights, subject to appropriate visual and contextual site analysis.						
O-CC-AS-4 Require effective pedestrian linkages to Mac Duirmada Station from Adelaide Square.						
O-CC-AS-5 Encourage the provision of a focal point in the square, possibly in the form of public art structures.						
O-CC-AS-6 Facilitate the relocation of the existing bus maintenance depot currently accessed off the corner of Adelaide Street and Lord Edward Street, and the appropriate redevelopment of the site.						
<i>Quay Street Square</i> O-CC-QS-1 Create a public square/park on the existing site of Quay Street Car Park.						
O-CC-QS-2 Ensure that any redevelopment proposal in the vicinity of Quay Street Car Park (including its redevelopment as a public open space) involves buildings of a suitable scale and a volumetric composition able to frame the proposed urban square.						
<i>Stephen Street Square</i>						

<p>O-CC-SS-1 Develop Stephen Street car park as a public square capable of accommodating a variety of open-air activities, including an outdoor market area.</p> <p>O-CC-SS-2 Retain, where possible, the existing mature trees on the riverbank adjacent to the existing car park site.</p> <p><i>Central Square</i></p> <p>O-CC-CS-1 Create an urban square in the middle of the Centre Block, in accordance with the Centre Block Masterplan and permitted developments.</p> <p><i>Museum Square</i></p> <p>O-CC-MS-1 Create an urban square in the Green Fort Precinct, connecting the proposed County Museum and the refurbished and extended Model::Niland Gallery.</p>						
<b>Public realm policies</b>						
<p>P-CC-PR-1 Promote the development of a pedestrian-friendly city centre through a programme of pedestrianisation, pavement widening and traffic calming.</p> <p>P-CC-PR-2 Improve the public realm in the city centre by requiring that overhead wires be placed underground, by improving street lighting, paving, landscaping, introducing street furniture and placing public art objects.</p> <p>P-CC-PR-3 Ensure that street furniture is sympathetic with its historic surroundings as part of a consistent approach for each of the various character areas of the city centre.</p> <p>P-CC-PR-4 Encourage the “greening” of the city centre by planting trees/flowers and by introducing planter boxes at appropriate locations.</p>	<b>A1 M2 CH2</b>					
<b>Public realm objectives</b>						
<p>O-CC-PR-1 Carry out street improvement works to Castle Street, Grattan Street, High Street, Market Street, John Street and Abbey Street to provide for reduced carriageway width, wider public footpaths and repaving.</p> <p>O-CC-PR-2 Carry out street improvement works to the western side of Wine Street from the Adelaide Street Junction to O’Connell Street to include for reduced carriageway width, wider public footpaths and repaving while facilitating servicing, public utility access and access for people with disabilities.</p> <p>O-CC-PR-3 Pedestrianise Market Cross at the heart of the city.</p>	<b>A1 M2</b>					
<b>Inner Relief Road urban design policies</b>						
<p>P-CC-IRR-1 Consider permitting taller buildings (at least five stories) on particular sites along the Inner Relief Road, subject to high-quality design based on comprehensive site contextual analysis.</p> <p>P-CC-IRR-2 Encourage the upgrading and improved presentation of the rear elevations of properties fronting onto Wolfe Tone Street.</p>			<b>CH2 L1</b>			
<b>Inner Relief Road urban design objectives</b>						
<p>O-CC-IRR-1 Promote street-fronting development with active ground floors along the Inner Relief Road between Hughes Bridge and the junction with John Street, in order to create a pedestrian-friendly streetscape and reduce the strong boundary effect between the west and east side of city.</p> <p>O-CC-IRR-2 Improve the pedestrian environment along the Inner Relief Road between Hughes Bridge and the junction with John Street in terms of pedestrian crossings, pavements, railings, landscaping.</p>	<b>CH2</b>					



<b>Inner City urban design policies</b>						
<p>P-IC-UD-1 Encourage, as appropriate, the redevelopment and regeneration of brownfield sites in existing residential areas where it can be shown that new developments incorporate proposals to improve the public realm – such as the upgrading of an existing open space, the development of a playground, repaving and landscaping – and where such improved areas are accessible to the wider community.</p> <p>P-IC- UD-2 Improve the public realm of existing residential areas by introducing traffic calming measures, environmental improvements, provision of open spaces, landscaping, tree planting.</p> <p>P-IC- UD-3 Facilitate the large-scale, comprehensive redevelopment of established residential areas, where appropriate, based on detailed masterplans prepared in consultation with the community in the context of Local Area Plans for the respective areas.</p>	<b>S1 A1 M2 CH2</b>		<b>CH1</b>			
<b>New residential areas – urban design policies</b>						
<p>P-OC-R-1 Require diversity in the density of development and in the form, size and type of dwellings within new residential areas. Monotonous, repetitive use of a limited number of house types (“suburban”-style estates) is strongly discouraged.</p> <p>P-OC-R-2 Require a high standard of design for all residential developments in terms of buildings, and also in terms of streets and open space layout, in order to ensure pedestrian safety and create attractive, distinctive living environment.</p> <p>P-OC-R-3 Promote energy conservation and renewable energy technologies in new residential developments. Such measures shall be consistent with national policies.</p> <p>P-OC-R-4 Encourage the provision of strong building frontages onto the main thoroughfares, to create definite building lines and continuity of the city structure where appropriate.</p> <p>P-OC-R-5 Ensure that new developments are designed in a manner which respects the residential amenity of adjoining dwellings.</p> <p>P-OC-R-6 Require new developments to have regard to the DoEHLG’s documents Quality Housing for Sustainable Communities – Best Practice Guidelines (2007), Sustainable Residential Development in Urban Areas (2008) and the accompanying Best Practice Urban Design Manual (2008).</p> <p>P-OC-R-7 Implement the requirements of the Sustainable Urban Housing: Design Standards for Apartments (2006) and the Quality Housing for Sustainable Communities as issued by the DOEHLG 2007, in respect of all apartments and housing units built in mixed-use or dedicated apartment complexes. Such requirements will include:</p> <ul style="list-style-type: none"> <li>a. apartment/house design</li> <li>b. minimum internal design standards for apartments</li> <li>c. provision of community facilities, open space and balconies</li> <li>d. access for people with disabilities</li> </ul> <p>P-OC-R-8 In schemes comprising more than 20 residential units, require that the standards relating to apartment size and private open space are exceeded in 40% of the units.</p> <p>P-OC-R-9 Ensure that the design of residential development located on the edge of the current built-up area takes into consideration the context and character of the surrounding countryside, retains and enhances – where appropriate – existing features such as field boundaries, green roads, mature trees, distinctive landscape features etc.</p> <p>P-OC-R-10 Require development boundaries at the current urban-rural interface (at time of planning) to reflect the nature and character of boundaries typical to the surrounding countryside.</p>	<b>S1 A1 M2 CH2</b>		<b>CH1</b>			

<b>Neighbourhood Centres – urban design policies</b>						
<p>P-OC-NC-1 Consider, subject to high-quality design, increased building heights and higher densities in mixed-use developments at new and existing neighbourhood centres (with retail units at ground-floor level and offices/apartments overhead).</p> <p>P-OC-NC-2 Require the provision of open space in the form of a pocket park or urban square, with playgrounds or skate-board parks where appropriate. The open space should be framed and overlooked by buildings.</p> <p>P-OC-NC-3 Require that car parking serving neighbourhood centres be located behind the building line, while ensuring that all spaces are overlooked, convenient and easily accessible. In particular, provision for private car parking (for either business owners or apartment dwellers) will be required to be located to the rear or side of buildings.</p>	<b>S1 CH2</b>		<b>CH1</b>			
<b>Economic Spine – urban design policy</b>						
<p>P-OC-ES-1 To promote the development of strong building lines in terms of design - height, scale, orientation, massing and elevational treatment – along the identified Economic Spine (N4/Inner Relief Road, N15/Bundoran Road and along the old N4/Dublin Road north of Carrowroe Roundabout.</p>			<b>CH1 CH2 L1</b>			
<b>City Fringes – urban design policies</b>						
<p>P-CYF- 1 Ensure that any development of single houses, which occurs within the city fringes in accordance with policies stipulated in Chapter 5 of this plan, respects the local character and integrates into the surrounding countryside and/or built environment.</p> <p>P-CYF-2 Ensure that the design of residential, commercial or industrial development located on the edge of the built-up area or in the vicinity of the development limit takes into consideration the context and character of the surrounding countryside, retains and enhances – where appropriate – existing features such as field boundaries, green roads, mature trees, distinctive landscape features etc.</p> <p>P-CYF-3 Require development boundaries at the urban-rural interface to reflect the nature and character of boundaries typical to the surrounding countryside.</p> <p>P-CYF-4 Ensure that all new development at the urban-rural fringe is of a high quality in terms of design, layout and use of materials and finishes.</p> <p>P-CYF-5 Require that the layout of any new development located on or in proximity to the city edge addresses rather than “backs onto” the surrounding countryside and has regard to any designated green corridors identified in Chapter 11 in terms of their layout, orientation and design.</p> <p>P-CYF-6 Facilitate permeability at the edge of built-up areas and improve access to the surrounding countryside and to all designated green corridors identified in Chapter 11 of this Plan, where possible and appropriate.</p>			<b>L1 S1 B3</b>			
<b>Urban regeneration policies</b>						
<p>P-UR-1 Discourage piecemeal development on the regeneration sites listed above.</p> <p>P-UR-2 Require that any development on the listed sites be planned/developed in the context of an urban design framework or site development brief.</p> <p>P-UR-3 Ensure that new development is carried out in an orderly and planned manner, having consideration for the future development and form of the area.</p>	<b>CH2</b>			<b>S1</b>		

<p>P-UR-4 Facilitate and permit plot amalgamation and land assembly in the centre of blocks (backlands of plots), as a means of assisting urban regeneration and so as to promote the commercial viability of the city centre, while ensuring that there is a balance between the scale of the development proposals, in terms of height, mass and bulk, so as not to dwarf the traditional perimeter buildings of the block.</p> <p>P-UR-5 Generally, maintain a continuous building line around the perimeter of the block – this assists in maintaining the character of the area and can screen multi-storey and surface car parks, loading bays and service yards within blocks.</p> <p>P-UR-6 Promote the principles of contextual compatibility for all new buildings within the historic city centre and promote carefully-designed architectural solutions that are modern and innovative.</p> <p>P-UR-7 Ensure that any new development activity acknowledges the urban block structure as the traditional frame for development. In particular, buildings will be required to maintain historical building lines and there will be a presumption against new buildings stepping back from established building lines, except for key public buildings, or where a new building might interfere with the setting of a protected structure or adjoining an ACA.</p> <p>P-UR-8 The maintenance of the traditional plot width along the perimeter of blocks will be generally required within the Zone of Archaeological Potential of Sligo, particularly where the building façade is manifested on the streetscape. Under special circumstances, a new building with a broader plot width might be permitted, but the façade would be required to include some form or articulation that emulates or fits in with the traditional streetscape character.</p> <p>P-UR-9 Any development in the city centre should have regard to the urban morphology of the area (i.e. the street pattern, block form, plot width and depth). For any infill development in the heart of the city centre, particularly along the street front or block edge, there is a need to consider the established plot width and building height, as these contribute significantly to the “grain” of a streetscape.</p>						
<b>Urban regeneration objectives</b>						
<p>O-UR-1 Prepare, as resources permit, or require the preparation by private developers in conjunction with the local authorities, of urban design frameworks for the above-mentioned sites.</p>	<b>CH2</b>					
<b>Tall buildings policies</b>						
<p>P-TB-1 Require that all proposals for development on the above-mentioned sites have regard to Section X.Y on taller buildings in the Development Management Standards chapter of this Plan.</p> <p>P-TB-2 To require that all proposals for development on these sites are accompanied by a detailed design statement.</p> <p>P-TB-3 To ensure that all new development on these sites are of high quality in terms of design, layout, use of materials and finishes.</p>	<b>L1 CH2</b>					
<b>Urban design implementation policies</b>						
<p>P-IMP-1 Promote high-quality architectural solutions and innovative urban design initiatives, through the preparation of design guidelines, urban design frameworks, masterplans and site briefs.</p> <p>P-IMP-2 Require the submission of a design statement with all major developments, proposals for sensitive sites and sites where taller buildings may be considered.</p>	<b>L1 CH2</b>					



## 8.13 Chapter 13: Heritage

	Likely to <b>Improve</b> status of SEOs	Probable <b>Conflict</b> with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	Uncertain interaction with status of SEOs	<b>Neutral</b> interaction with status of SEOs	<b>No Likely</b> interaction with status of SEOs
<b>Heritage objectives</b>						
O-H-1 Prepare and implement, in partnership with all relevant stakeholders, a County Heritage Plan.	<b>B1 B2 B3</b>		<b>S1</b>			
O-H-2 Prepare and implement, in partnership with all relevant stakeholders, a Local Biodiversity Action Plan.	<b>HH1 W1</b> <b>W2 M1</b> <b>CH1 CH2</b> <b>L1</b>					
<b>Archaeological heritage policies</b>						
P-AH-1 Protect and enhance archaeological sites, monuments, their setting and ZAPs within the SEDP area, including those that are listed in the Record of Monuments and Places (RMP) or newly discovered sub-surface archaeological remains. P-AH-2 Require archaeological surveys, test excavation and/or monitoring for planning applications in areas of archaeological importance, if the application is likely to impact upon in-situ archaeological structures and deposits. Other areas of high archaeological potential may exist outside the boundaries of conventionally recognised monuments especially in wetlands and former wetlands and in the inter-tidal zone. P-AH-3 Ensure that full consideration is given to the protection of archaeological heritage when undertaking, approving or authorising development in order to avoid unnecessary conflict between development and the protection of the archaeological heritage. P-AH-4 Favour the preservation in-situ (or at a minimum, preservation by record) of archaeological sites or objects and their settings, in accordance with national policy. This is most effectively achieved by the refurbishment of existing buildings, in situations where it is possible to retain the greater part of existing structures without the need for new foundations. P-AH-5 Ensure that development within the vicinity of a Recorded Monument or ZAP does not detract from the setting of the feature and is sited and designed appropriately. P-AH-6 Protect historical burial grounds and encourage their maintenance in accordance with conservation principles. Development may be restricted or conditions requiring substantial excavation may be imposed in and adjacent to former burial grounds. P-AH-7 Require the retention of surviving medieval plots and street patterns within Sligo City in the course of development. P-AH-8 Encourage and promote the appropriate management and enhancement of the archaeological heritage within the Plan area. P-AH-9 Facilitate and enhance public access to, and understanding of, the archaeological heritage and disseminate information and advice on the archaeological heritage to prospective developers and the general public.	<b>CH1 L1</b>		<b>S1</b>			

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<p>P-AH-10 Require that all development proposals for industrial buildings and sites of industrial archaeological importance be accompanied by an assessment of the surrounding environment. New development should be designed in sympathy with existing features and structures.</p> <p>P-AH-11 Ensure – through the application of appropriate design standards and criteria – that land uses do not give rise to significant losses of the integrity, quality or context of archaeological material - except as may be conditioned or directed by the appropriate heritage agencies.</p>						
<b>Archaeological heritage objectives</b>						
<p>O-AH-1 Seek archaeological impact assessments as part of the planning application when proposed development could affect a Recorded Monument, a Zone of Archaeological Potential, or an as yet unidentified element of archaeological heritage, or its setting.</p> <p>O-AH-2 Ensure that a suitably qualified archaeologist carries out all archaeological works required when permission is granted for development that requires mitigation of impacts on the archaeological heritage.</p> <p>O-AH-3 Have regard to the advice and recommendations of the prescribed bodies as defined in the Planning and Development Act 2000) in relation to undertaking, approving or authorising development.</p> <p>O-AH-4 Ensure that all proposals for linear development over one kilometre in length, or proposals for development involving ground clearance of a half hectare or more, or proposals for development affecting present or former wetlands, unenclosed land, or rivers and estuaries, are referred to the prescribed bodies mentioned above.</p> <p>O-AH-5 Encourage the incorporation of, or the reference to significant archaeological finds into development schemes, where feasible.</p> <p>O-AH-6 Identify and protect internationally important archaeological landscapes such as the megalithic cemetery of Carrowmore and its associated monuments at Knocknarea and Cairns Hill, in co-operation with the appropriate Government agency.</p> <p>O-AH-7 Identify appropriate archaeological sites in the Plan area to which public access could be provided and work to secure public access, where appropriate, in consultation with the land owners.</p>	CH1 L1		S1			
<b>Archaeological heritage policies for the Cuil Irra peninsula</b>						
<p>P-AH-12 Have regard to the recommendations and guidelines which will be established in the document A Conservation Study of the Passage Tomb Group and Associated Archaeological Features and Other Monuments of Knocknarea, Carrowmore and Cairns Hill, Co. Sligo, commissioned by the DoEHLG in partnership with relevant stakeholders.</p> <p>P-AH-13 Protect groups of important National Monuments in the Cuil Irra Peninsula, inclusive of their contextual setting and interpretation through careful management of development in the area.</p> <p>P-AH-14 Protect the vulnerable archaeological and cultural landscape and to protect views within and adjacent to Carrowmore Megalithic Cemetery, Knocknarea and Cairns Hill.</p> <p>P-AH-15 Protect the context, amenity and integrity of archaeological heritage and the landscape at Cairns Hill, including the direct intervisibility between cairns on Cairns Hill, the direct views between Cairns Hill and Knocknarea and Carrowmore and the direct views between Cairns Hill and other relevant locations within the wider Cuil Irra passage tombs complex.</p>	CH1 L1		S1			

<b>Archaeological heritage objectives for the Cuil Irra peninsula</b>						
O-AH-8 Establish a co-ordinated signage programme for Carrowmore Megalithic Cemetery, Knocknarea and Cairns Hill with the relevant agencies.	CH1 L1		S1			
<b>Market Cross ACA - management policies</b>						
Existing P-ACA-MC-1 Retain the city plan of narrow building plots. Plot amalgamation and rebuild on street fronts is discouraged. P-ACA-MC-2 Require the conservation, retention, and/or reinstatement of traditional features and window elements, such as the original sash and casement windows. P-ACA-MC-3 Respect the original fenestration patterns, window opening sizes and window alignments of the historic streetscape. P-ACA-MC-4 Ensure that window designs and details are consistent with original designs, e.g. prohibit swing-out designs where sash windows were the traditional type. P-ACA-MC-5 Original doors are to be conserved, retained and/or replaced. PVC or aluminium type doors are not acceptable. P-ACA-MC-6 Prohibit the painting of cut stone and red brick details or facades of buildings. P-ACA-MC-7 Retain all decorative elements of facades. P-ACA-MC-8 Preserve all historic shop fronts. P-ACA-MC-9 Remove inappropriate oversized signage and replace by a more sympathetic one according to the guidelines set out in the development control section.	CH2 L1		S1			
New Development P-ACA-MC-10 Historic building plots have to be followed by new developments. Plot amalgamation is discouraged. P-ACA-MC-11 New development must respect historic rooflines; building heights are generally restricted to two- and three-storey buildings. P-ACA-MC-12 Retain the character of continuous building lines and terraces. P-ACA-MC-13 Historicist styles are to be avoided; good quality buildings of modern expression are preferred. The involvement of an architect is recommended. P-ACA-MC-14 The mixture of commercial and residential use in the area is to be retained. Particular residential uses are to be protected and will be encouraged above ground floor level. P-ACA-MC-15 Remove all overhead wires and cabling at facades. P-ACA-MC-16 Following the completion of any pedestrianisation of Castle Street and Grattan Street, there may be opportunities for extending the footpath width of streets of residential character, reinforcing traffic calming and traffic management. Colours and materials should be chosen that respect existing context and materials of those streetscapes. P-ACA-MC-17 Enhance the presentation of the Lady Erin statue and remove the telephone box.	CH2 L1		S1			
<b>Courthouse ACA - management policies</b>						
Existing P-ACA-CH-1 Retain the city plan of narrow building plots. Plot amalgamation and rebuild on street fronts is discouraged. P-ACA-CH-2 Require the conservation, retention, and/or reinstatement of traditional features and window elements, such as the original sash and casement windows. P-ACA-CH-3 Respect the original fenestration patterns, window opening sizes and window alignments of the historic streetscape. P-ACA-CH-4 Ensure that window designs and details are consistent with original designs, e.g. prohibit swing-out designs where sash windows were the traditional type. P-ACA-CH-5 Original doors are to be conserved, retained and/or replaced. PVC or aluminium type doors are not acceptable. P-ACA-CH-6 Prohibit the painting of cut stone and red brick details or facades of buildings. P-ACA-CH-7 Retain all decorative elements of facades. P-ACA-CH-8 Preserve all historic shop fronts. P-ACA-CH-9 Remove inappropriate over-sized signage and replace by a more sympathetic one according to the guidelines set out in the development control section.	CH2 L1		S1			



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<p>New Development</p> <p>P-ACA-CH-10 Historic building plots have to be followed by new developments. Plot amalgamation is prohibited.</p> <p>P-ACA-CH-11 New development must respect historic rooflines.</p> <p>P-ACA-CH-12 Retain the character of continuous building lines and terraces.</p> <p>P-ACA-CH-13 Historicist styles are to be avoided; good quality buildings of modern expression are preferred. The involvement of an architect is recommended.</p> <p>P-ACA-CH-14 Remove all overhead wires and cabling at facades.</p> <p>P-ACA-CH-15 Introduce good quality, modern street furniture, which respects the historic setting without being neo-traditional.</p> <p>P-ACA-CH-16 Conserve, retain and where appropriate replace traditional limestone flags and cobblestones on Old Market Street.</p>	CH2 L1		S1			
<b>Cathedral ACA - management policies</b>						
<p>Existing</p> <p>P-ACA-CA-1 Protect the graveyard related to St. John's Cathedral, in particular historic tombstones and mausoleums.</p> <p>P-ACA-CA-2 Protect and enhance the amenity of the park within the grounds of the Cathedral of the Immaculate Conception.</p> <p>P-ACA-CA-3 Preserve details, such as walls, cast-iron railings, steps etc.</p> <p>P-ACA-CA-4 Retain the grounds of St. Mary's Presbytery free from development and protect the avenue of mature trees.</p> <p>P-ACA-CA-5 Require the conservation, retention, and/or reinstatement of traditional features and window elements, such as the original sash and casement windows.</p> <p>P-ACA-CA-6 Respect the original fenestration patterns, window opening sizes and window alignments of the historic streetscape.</p> <p>P-ACA-CA-7 Ensure that window designs and details are consistent with original designs, e.g. prohibit swing out designs where sash windows were the traditional type.</p> <p>P-ACA-CA-8 Original doors are to be conserved, retained and/or replaced. PVC or aluminium type doors are not acceptable.</p> <p>P-ACA-CA-9 Prohibit the painting of cut stone and red brick details or facades of buildings.</p> <p>P-ACA-CA-10 Retain all decorative elements of facades. Brick dressings of openings should not be painted or rendered.</p> <p>P-ACA-CA-11 Remove inappropriate over-sized signage and replace by a more sympathetic one according to the guidelines set out in the development control section.</p>	CH2 L1		S1			
<p>New Development</p> <p>P-ACA-CA-12 Retain the character of continuous building lines and terraces.</p> <p>P-ACA-CA-13 Historicist styles are to be avoided; good quality buildings of modern expression are preferred. The involvement of an architect is recommended.</p> <p>P-ACA-CA-14 The conversion of residential uses to commercial and other uses will be strictly controlled and will generally be prohibited, except where there is no change to the façade or the character of the area. Possible exemptions are B&amp;Bs, or medical surgeries. Live-work units will be permitted subject to small scaled signs of minimal impact.</p> <p>P-ACA-CA-15 Remove all overhead wires and cabling at facades.</p> <p>P-ACA-CA-16 Introduce good quality, modern street furniture, which respects the historic setting without being neo-traditional.</p> <p>P-ACA-CA-17 There may be opportunities for extending the footpath width of streets of residential character, reinforcing traffic calming and traffic management - particularly on Charles Street, Church Street and John Street. Colours and materials should be chosen that respect existing context and materials of those streetscapes.</p>	CH2 L1		S1			
<b>Wolfe Tone Street ACA –management policies</b>						
<p>Existing</p> <p>P-ACA-WT-1 Conserve and retain original features and decorative elements of terraces, including bargeboards, railings, etc.</p> <p>P-ACA-WT-2 Retain the city plan of narrow building plots. Plot amalgamation and rebuild on street fronts is discouraged.</p> <p>P-ACA-WT-3 Require the conservation, retention, and/or reinstatement of traditional features and window elements, such as the original sash and casement windows.</p> <p>P-ACA-WT-4 Respect the original fenestration patterns, window opening sizes and window alignments of the historic streetscape.</p>	CH2 L1		S1			

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<p>P-ACA-WT-5 Ensure that window designs and details are consistent with original designs, e.g. prohibit swing-out designs where sash windows were the traditional type.</p> <p>P-ACA-WT-6 Original doors are to be conserved, retained and/or replaced. PVC or aluminium-type doors are not acceptable.</p> <p>P-ACA-WT-7 Prohibit the painting of cut stone and red brick details or facades of buildings.</p> <p>P-ACA-WT-8 Retain all decorative elements of facades.</p>						
<p>New Development</p> <p>P-ACA-WT-9 Historic building plots have to be followed by new developments. Plot amalgamation is discouraged.</p> <p>P-ACA-WT-10 New development must respect historic rooflines. Building heights are restricted to two and three storeys. Where strict rooflines appear along terraces, these have to be adopted.</p> <p>P-ACA-WT-11 Retain the character of continuous building lines and terraces.</p> <p>P-ACA-WT-12 Historicist styles are to be avoided; good quality buildings of modern expression are preferred. The involvement of an architect is recommended.</p> <p>P-ACA-WT-13 The conversion of residential uses to commercial and other uses will be strictly controlled and will generally be prohibited, except where there is no change to the façade or the character of the area. Possible exemptions are B&amp;Bs, or medical surgeries. Live-work units will be permitted subject to small scaled signs of minimal impact.</p> <p>P-ACA-WT-14 Remove all overhead wires and cabling at facades.</p> <p>P-ACA-WT-15 Encourage the provision of street trees, where this is likely to enhance the street.</p> <p>P-ACA-WT-16 Introduce good quality, modern street furniture, which respects the historic setting without being neo-traditional.</p>	CH2 L1		S1			
<b>O'Connell Street ACA - management policies</b>						
<p>Existing</p> <p>P-ACA-OC-1 Require the conservation, retention, and/or reinstatement of traditional features and window elements, such as the original sash and casement windows.</p> <p>P-ACA-OC-2 Respect the original fenestration patterns, window opening sizes and window alignments of the historic streetscape.</p> <p>P-ACA-OC-3 Ensure that window designs and details are consistent with original designs, e.g. prohibit swing-out designs where sash windows were the traditional type.</p> <p>P-ACA-OC-4 Original doors are to be conserved, retained and/or replaced. PVC or aluminium-type doors are not acceptable.</p> <p>P-ACA-OC-5 Prohibit the painting of cut stone and red brick details or facades of buildings.</p> <p>P-ACA-OC-6 Retain all decorative elements of facades. Brick dressings of openings should not be painted or rendered.</p> <p>P-ACA-OC-7 Preserve all historic shop fronts.</p> <p>P-ACA-OC-8 Remove inappropriate over-sized signage and replace by a more sympathetic one according to the guidelines set out in the development management standards section.</p>	CH2 L1		S1			
<p>New Development</p> <p>P-ACA-OC-9 Historic building plots have to be followed by new developments. Plot amalgamation is prohibited.</p> <p>P-ACA-OC-10 New development must respect historic rooflines; building heights are restricted to two and three storeys. Where strict rooflines appear along terraces, these have to be adopted.</p> <p>P-ACA-OC-11 Retain the character of continuous building lines and terraces.</p> <p>P-ACA-OC-12 Historicist styles are to be avoided; good quality buildings of modern expression are preferred. The involvement of an architect is recommended.</p> <p>P-ACA-OC-13 Remove all overhead wires and cabling at facades.</p> <p>P-ACA-OC-14 Introduce good quality, modern street furniture, which respects the historic setting without being neo-traditional.</p> <p>P-ACA-OC-15 Introduce high-quality fittings which respect and enhance the historic character of the area without being pastiche.</p> <p>P-ACA-OC-16 Ensure that any paving being laid out in conjunction with the pedestrianisation of O'Connell Street uses suitably-coloured materials that are sensitive to the historic setting.</p>	CH2 L1		S1			

Built/architectural heritage – general policies						
<p>P-BH-1 Preserve, protect and enhance the architectural heritage of the Sligo and Environs Plan area for future generations. The area's architectural heritage is of national and regional importance and is central to Sligo's ability to promote itself as a centre for cultural tourism.</p> <p>P-BH-2 Generally encourage the re-use of older buildings through renovation and rehabilitation, in preference to their demolition or reconstruction.</p> <p>P-BH-3 Secure the protection of buildings and structures or features of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest identified on the Record of Protected Structures.</p> <p>P-BH-4 Have regard to the 2004 Architectural Heritage Protection Guidelines issued by the DoEHLG when assessing proposals for development affecting a protected structure.</p> <p>P-BH-5 Exempt the normal requirement for the payment of a development contribution if the proposal involves restoration/refurbishment of a protected structure to a high architectural standard.</p> <p>P-BH-6 Ensure that any development, modifications, alterations, or extensions affecting a protected structure, adjoining structure or structure within an ACA is sited and designed appropriately and is not detrimental to the character of the structure, to its setting or the general character of the ACA.</p> <p>P-BH-7 Promote the principles of contextual compatibility for all new buildings within the historic city centre and promote carefully-designed architectural solutions that are modern and innovative, except in or adjoining an ACA or a protected structure, where, in the opinion of the planning authority, redevelopment in the traditional or historicist manner may be more appropriate.</p> <p>P-BH-8 Ensure that any new development activity acknowledges the urban block structure as the traditional frame for development - in particular, buildings will be required to maintain historical building lines. There will be a presumption against new buildings stepping back from established building lines, except for key public buildings, or where a new building might interfere with the setting of a protected structure or an ACA.</p> <p>P-BH-9 Maintain the traditional plot width along the perimeter of blocks within the central Zone of Archaeological Potential of Sligo, particularly where the building façade is manifested on the streetscape. Under some circumstances, a new building with a broader plot width might be permitted, but the façade will be required to include some form or articulation that emulates or fits in with the traditional streetscape character.</p> <p>P-BH-10 Facilitate and permit plot amalgamation and land assembly in the centre of blocks (backlands of plots), as a means of assisting urban renewal and so as to promote the commercial viability of the city centre, while ensuring that there is a balance between the scale of the development proposals, in terms of height, mass and bulk, so as not to dwarf the traditional perimeter buildings of the block. An exception to this policy is made within delineated boundaries of ACAs, unless it can be shown that plot amalgamation would complement the character of the area.</p> <p>P-BH-11 Generally maintain a continuous building line around the perimeter of the urban blocks - this assists in maintaining the character of an area and can screen multi-storey and surface car parks, loading bays and service yards within blocks.</p> <p>P-BH-12 Ensure that historic landmark buildings are protected and that new buildings do not interfere negatively with the historic skyline.</p>	CH2 L1		S1			



<p>P-BH-13 Generally, only consider applications for change of use where the level of physical intervention required to make the building suitable for its new use does not damage or alter the character of the structure that makes it of special interest.</p> <p>P-BH-14 Protect the historic bridges, harbours, railways and roadside features (such as historic milestones, cast-iron pumps and post-boxes) and furniture within the Plan area.</p> <p>P-BH-15 Encourage and advise on the restoration of the city's traditional shop fronts.</p> <p>P-BH-16 Promote the visual attractiveness of the city by encouraging owners of derelict sites/buildings to develop and improve them in an appropriate manner and pursue, where necessary, owners of buildings and sites under the Derelict Sites Act, 1990.</p> <p>P-BH-17 Have regard to the recommendations and guidelines established in the Conservation Plan for Sligo Gaol, commissioned by Sligo local authorities.</p> <p>P-BH-18 Facilitate enabling development to be carried out in conjunction with works to protected structures where consistent with the parameters outlined in Section 13.2.3 Enabling development.</p> <p>P-BH-19 Continue to develop the Council's advisory/educational role with regard to heritage matters and to promote awareness and understanding of the architectural heritage.</p> <p>P-BH-20 Encourage the retention of original windows, doors, renders, roof coverings, chimneys, rainwater goods and other significant features of structures of architectural heritage merit, whether protected or not.</p>						
<b>Built/architectural heritage objectives</b>						
<p>O-BH-1 Review the RPS on an ongoing basis and add structures of special interest as appropriate, including 20th-century structures and incorporating recommendations from the National Inventory of Architectural Heritage.</p> <p>O-BH-2 Have regard to the advice and recommendations of prescribed bodies in relation to undertaking, approving or authorising development.</p> <p>O-BH-3 Provide detailed guidance notes and advice to the public, developers, public bodies, groups and associations with regard to protected structures, ACAs, conservation grant schemes and architectural heritage in general.</p> <p>O-BH-4 Assess the surviving demesnes within the SEDP area and promote the conservation of their essential character, both built and natural, while allowing for appropriate re-use.</p> <p>O-BH-5 Identify and retain in situ good examples of historic street furniture, e.g. cast-iron post-boxes, water pumps, signage, street lighting, kerbing, traditional road and street surface coverings/finishes etc.</p> <p>O-BH-6 Introduce a uniform type of fitting for street lighting throughout the city centre, which is sympathetic with the historic surroundings.</p>	<b>CH2 L1</b>		<b>S1</b>			
<b>Designated natural heritage sites policies</b>						
<p>P-NH-1 Protect natural heritage sites designated in European and national legislation and in other relevant international conventions, agreements and processes. This includes sites designated or proposed as Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Ramsar sites and Natural Heritage Areas (NHAs).</p> <p>P-NH-2 Maintain, and where possible enhance, the conservation value of cSACs (candidate SACs) and SPAs and any other sites that may be proposed for designation during the lifetime of this plan.</p>	<b>B1 B2 B3 HH1 W1 W2 W4 W5 M1</b>					

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<p>P-NH-3 Consult with the relevant prescribed bodies and appropriate agencies when considering undertaking, approving or authorizing developments which are likely to affect designated natural heritage sites or those proposed to be designated.</p> <p>P-NH-4 Support and co-operate with statutory authorities and others in support of measures taken to manage designated nature conservation sites in order to achieve their conservation objectives.</p> <p>P-NH-5 Promote areas for appropriate development, primarily for recreational and educational purposes, that would not conflict with maintaining favourable conservation status and the meeting of the conservation objectives for these sites.</p>						
<b>Designated natural heritage sites objectives</b>						
<p>O-NH-1 Require an appropriate environmental assessment in respect of any proposed development likely to have an impact on a designated natural heritage site or those sites proposed to be designated.</p> <p>O-NH-2 Ensure that environmental assessments in relation to designated natural heritage sites (or those sites proposed to be designated) are carried out by appropriate professionals.</p> <p>O-NH-3 Provide guidance to developers in relation to proposed developments which are likely to affect designated natural heritage sites or those sites proposed to be designated.</p> <p>O-NH-4 Any plan or project not directly connected with or necessary to the management of a Natura 2000 site, but likely to have significant effect thereon, either individually or in combination with other plans or projects, shall be subject to an appropriate assessment in accordance with Art. 6 of Directive 92/43/EEC, of its implications for the Natura 2000 site in view of the site's conservation objectives.</p>	<p><b>B1 B2 B3 HH1 W1 W2 W4 W5 M1</b></p>					
<b>Protected species policies</b>						
<p>P-NH-6 Ensure that development does not have a significant adverse impact, incapable of satisfactory mitigation, on plant, animal or bird species protected by law.</p> <p>P-NH-7 Consult with the National Parks and Wildlife Service, and take account of any licensing requirements, when undertaking, approving and authorising development which is likely to affect plant, animal or bird species protected by law.</p>	<p><b>B1 B2 B3 HH1 W1 W2 W4 W5 M1</b></p>					
<b>Protected species objectives</b>						
<p>O-NH-5 Provide guidance to developers and others in relation to species protected by law and their protection and management in the context of development.</p> <p>O-NH-6 Undertake surveys, as appropriate, to establish the location of protected flora and fauna in the Plan area.</p>	<p><b>B1 B2 B3 HH1 W1 W2 W4 W5 M1</b></p>					
<b>Policies for nature conservation outside designated sites</b>						
<p>P-NH-8 Ensure that proposals for development protect and enhance biodiversity, wherever possible, by minimising adverse impacts on existing habitats and by including mitigation and/or compensation measures, as appropriate, which ensure that biodiversity and landscape character are enhanced.</p> <p>P-NH-9 Protect and conserve ecological networks and prevent loss and fragmentation of ecological corridors where possible.</p> <p>P-NH-10 Protect and manage existing woodlands, trees and hedgerows which are of amenity or biodiversity value and/or contribute to landscape character, and ensure that proper provision is made for their protection and management when undertaking, approving or authorising development.</p>	<p><b>B1 B2 B3 HH1 W1 W2 M1 L1 CH1</b></p>					

<p>P-NH-11 Ensure that, when undertaking, approving or authorising development, sufficient information is provided to enable an assessment of impacts on woodlands, trees and hedgerows.</p> <p>P-NH-12 Integrate biodiversity considerations into Local Authority plans, programmes and activities.</p> <p>P-NH-13 Recognise the biodiversity and archaeological importance of townland boundaries, including hedgerows, and promote their protection and retention.</p> <p>P-NH-14 Seek the control and/or eradication of invasive species as appropriate within the Plan area as opportunities and resources allow. Targeted invasive species control should be informed by current distribution of species, degree of threat posed and resources available to control and/or eradicate them.</p>						
<b>Objectives for nature conservation outside designated sites</b>						
<p>O-NH-7 Provide guidance for developers and the general public in relation to the conservation and enhancement of biodiversity and geological heritage.</p> <p>O-NH-8 Identify and protect, in co-operation with the relevant statutory agencies and other relevant groups, sites of local biodiversity importance, not otherwise protected by legislation.</p> <p>O-NH-9 Encourage the development of proposals for new woodlands utilising funding available through schemes such as the NeighbourWood and Native Woodland Schemes.</p> <p>O-NH-10 Undertake a study to document and map significant mature trees and hedgerows within the plan area within the lifetime of the plan.</p> <p>O-NH-11 Undertake a study to quantify the extent of invasive species with the Plan area, with recommendations of priority species for control and /or eradication, the degree of threat posed and the resources required for effective management.</p>	<b>B1 B2 B3 HH1 W1 W2 M1</b>					
<b>Inland waters policies</b>						
<p>P-NH-15 Protect rivers, streams and other water courses and, wherever possible, maintain them in an open state capable of providing suitable habitat for fauna and flora.</p> <p>P-NH-16 Protect and enhance the natural heritage and landscape character of river and stream corridors and valleys, maintain them free from inappropriate development and make provision for public access where feasible and appropriate.</p> <p>P-NH-17 Protect and enhance biodiversity richness by protecting rivers and stream corridors and valleys by reserving land along their banks for ecological corridors, maintaining them free from inappropriate development, and discouraging culverting or realignment.</p> <p>P-NH-18 Ensure that all proposed greenfield residential and commercial developments use sustainable drainage systems in accordance with best current practice.</p> <p>P-NH-19 Ensure that floodplains and wetlands within the Plan area are retained for their biodiversity and flood protection value.</p> <p>P-NH-20 Ensure that proposed developments do not adversely affect groundwater resources.</p>	<b>B1 B2 B3 HH1 W1 W2 W3 M1 L1 W5</b>					



<b>Inland waters objectives</b>						
<p>O-NH-12 Consult with prescribed bodies prior to undertaking, approving or authorising any works or development that may impact on rivers, streams and watercourses.</p> <p>O-NH-13 Require that runoff from a developed area does not result in deterioration of downstream watercourses or habitats, and that pollution generated by a development is treated within the development area prior to discharge to local watercourses.</p>	<p>B1 B2 B3 HH1 W1 W2 W3 M1 L1 W5</p>					
<b>Natural heritage - general policies</b>						
<p>P-H-21 Require any plans or projects arising from this plan – which are susceptible of having a significant adverse effect on Natura 2000 sites (as per Art. 6 of the Habitats Directive) due to their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects – to comply with the provisions of the Directive.</p> <p>P-H-22 Subsequent plan-making and adoption of plans arising from this plan shall be screened for the need to undertake Appropriate Assessment under Article 6 of the Habitats Directive.</p> <p>P-H-23 Ensure that the findings of habitat mapping projects (when completed) are utilised to inform the development management process.</p> <p>P-H-24 Ensure that no ecological networks, or parts thereof which provide significant connectivity between areas of local biodiversity, are lost without remediation as a result of implementation of the Plan.</p> <p>P-H-25 Require an appropriate visual impact assessment to be prepared for any proposed development that has potential to cause significant adverse impact on the landscape character in the Plan area and adjoining lands, using agreed and appropriate viewing points and methods.</p>	<p>B1 B2 B3 HH1 W1 W2 W3 W4 W5 L1</p>					

## 8.14 Chapter 14: Environmental Infrastructure

	Likely to <u>Improve</u> status of SEOs	Probable <u>Conflict</u> with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	Uncertain interaction with status of SEOs	<u>Neutral</u> interaction with status of SEOs	<u>No Likely</u> interaction with status of SEOs
<b>Water supply policies</b>						
<p>P-WS-1 Ensure that the existing and future population of the Sligo and Environs area is supplied with clean and wholesome drinking water, and has an adequate, sustainable and economic supply of good quality water for domestic, commercial and industrial use.</p> <p>P-WS-2 Conserve water supplies through the minimisation of leakage and wastage in the interests of efficiency and sustainability.</p> <p>P-WS-3 Promote public awareness and involvement in water conservation measures and implement water demand management strategies for all developments.</p>	HH1					

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<p>P-WS-4 Implement the requirements of, and provide the necessary water treatment infrastructure to achieve compliance with the 48 parameters set out under the EC (Drinking Water) (No. 2) Regulations 2007.</p> <p>P-WS-5 Achieve compliance with the relevant recommendations set out in The Provision and Quality of Drinking Water in Ireland - A Report for the Years 2006-2007 (Office of Environment Enforcement - EPA, 2007).</p> <p>P-WS-6 Ensure the adequacy of existing water supply in terms of quality, quantity and the potential risk to human health.</p>						
<b>Water supply objectives</b>						
<p>O-WS-1 Complete the planning and construction of the new water treatment plant at Kilsellagh.</p> <p>O-WS-2 Extend the existing water treatment plant at Foxes Den.</p> <p>O-WS-3 Improve and extend water supply schemes as needed arise.</p> <p>O-WS-4 Resolve any outstanding issues – including the identified inadequate treatment for Cryptosporidium at the Kilsellagh treatment plant – in order to allow the removal of public water supplies from the EPA remedial action list</p> <p>O-WS-5 Complete the Water Conservation Programme Stages 1 and 2, commence Stage 3 and seek funding for the preparation of a Water Conservation Plan for the Sligo and Environs area.</p> <p>O-WS-6 Provide support for the funding of water supply infrastructure, as identified by the local authorities.</p> <p>O-WS-7 Strive to address all water service deficits on zoned lands within the life time of the Plan.</p> <p>O-WS-8 Strive to complete all the planned water schemes within the timeframe as indicated in Table 14.A.</p> <p>O-WS-9 Address the significant water management issues identified in the Water Matters consultation publication of the Western River Basin District Project.</p>	<p><b>B1 B2 B3 HH1 W1 W2 W3 W4 M1</b></p>					
<b>Wastewater policies</b>						
<p>P-WW-1 Continue to implement the Sligo Main Drainage Scheme, by carrying out improvements to identified sewerage and drainage schemes so as to ensure sustainable treatment of effluent generated within the City and Environs.</p> <p>P-WW-2 Ensure that developers provide efficient drainage systems with separate foul and surface water networks.</p> <p>P-WW-3 Ensure that effluent / sludge is treated and disposed-of in accordance with the required European Union standards.</p> <p>P-WW-4 Facilitate appropriate proposals from private developers to extend existing public wastewater infrastructure networks, where such proposals would result in the servicing of zoned lands. Any such proposal shall be assessed on a case-by-case basis.</p> <p>P-WW-5 Ensure that all development involving wastewater disposal is permitted only on lands that are serviced by (or capable of being serviced by immediate connection to) public wastewater infrastructure with adequate capacity.</p> <p>P-WW-6 Ensure that public wastewater infrastructure connection is in place, with adequate capacity, before developments are occupied.</p>	<p><b>B1 B2 B3 HH1 W1 W2 W3 W4 M1</b></p>					

<b>Wastewater objectives</b>						
<p>O-WW-1 Complete the Sligo Main Drainage Treatment Works and monitor the need for expansion of capacity in the future.</p> <p>O-WW-2 Implement Phase 1 (WILT Phase) of Carrowroe Main Drainage Scheme.</p> <p>O-WW-3 Implement the Ballincar–Cregg–Rosses Point Main Drainage Scheme.</p> <p>O-WW-4 Implement the Cummeen Drainage Scheme.</p> <p>O-WW-5 Implement the Teesan–Lisnalurg Drainage Scheme.</p> <p>O-WW-6 Implement Phase 2 of the Carrowroe Main Drainage Scheme.</p> <p>O-WW-7 Continue the upgrading of the existing wastewater and stormwater sewer network to alleviate flooding and provide for future development.</p> <p>O-WW-8 Reserve lands for a pumping station at Tonaforbes, to the west of the Carrowroe Roundabout, to facilitate the servicing and development of zoned lands at this location.</p> <p>O-WW-9 Ensure that adequately designed grease-traps are installed in all commercial premises where food is prepared.</p> <p>O-WW-10 Ensure that adequately designed oil interceptors are installed in all commercial developments that include car-parks or other oil- and petrol-related activities.</p> <p>O-WW-11 Strive to address all wastewater service deficits on zoned lands within the life time of the Plan.</p> <p>O-WW-12 Strive to complete all the planned wastewater schemes within the timeframe as indicated in Table 14.B</p> <p>O-WW-13 Implement the relevant recommendations set out in Urban Wastewater Discharges in Ireland for Population Equivalents Greater than 500 Persons - A Report for the Years 2004 and 2005 (Office of Environment Enforcement - EPA, 2007).</p> <p>O-WW-14 Examine the feasibility of connecting unserviced areas, including individual properties serviced by septic tanks, to existing and planned sewer networks.</p>	<p><b>B1 B2 B3</b> <b>HH1 W1</b> <b>W2 W3</b> <b>W4 M1</b></p>					
<b>Surface water drainage policies</b>						
<p>P-SWD-1 Promote stormwater retention facilities for new developments and existing catchment areas, particularly where developments are proposed in proximity to an existing open water course or stream.</p> <p>P-SWD-2 Generally prevent the alteration of natural drainage systems and, in the case of development works, require the provision of acceptable mitigation measures in order to minimise the risk of flooding and negative impacts on water quality (including run-off, erosion and sedimentation).</p> <p>P-SWD-3 Preserve and protect the water quality of natural surface water storage sites, such as wetlands, where these help to regulate stream flows, recharge groundwater and screen pollutants (such features also provide important habitat functions).</p> <p>P-SWD-4 Generally prohibit the landfilling of wetlands, except in cases of overriding public interest.</p>	<p><b>B1 B2 B3</b> <b>HH1 W1</b> <b>W2 W3</b> <b>W4 W5</b></p>					



<p>P-SWD-5 Protect river channels and streams, which can facilitate surface water drainage, by ensuring that development is kept at an appropriate distance from stream banks and adequate protection measures are put in place.</p> <p>P-SWD-6 Discourage development in flood plains and natural water storage areas.</p> <p>P-SWD-7 Encourage and, where appropriate, require that the permitted flow from a development to a public stormwater drain or watercourse is restricted/equal to the natural run-off rates from the undeveloped site.</p> <p>P-SWD-8 Have regard to the DoEHLG Draft Planning Guidelines - The Planning System and Flood Risk Management, September 2008.</p>						
<b>Surface water drainage objectives</b>						
<p>O-SWD-1 Maintain the natural wetland characteristics of lands at the following locations, free from development, so as to ensure that at a minimum, part of their lands continue to function as natural stormwater retention areas: Cummeen, Ballinode, Cleveragh, Rosses Point Road, Drumaskibbole, Oakfield-Derrydarragh, Cloverhill Lough.</p> <p>O-SWD-2 Incorporate stormwater retention facilities, including possible reconstructed wetlands and ponds, in the following designated areas of open space:</p> <ul style="list-style-type: none"> <li>the proposed open space that adjoins the alluvial woodlands at Hazelwood and Ballinode, so as not to alter the natural hydrological characteristics of the existing alluvial woodlands and maintain the water quality of Lough Gill;</li> <li>the linear park and associated stream course that runs from Doonally, Shannon Oughter, Ballytivnan to Sligo Harbour.</li> </ul>	<b>B1 B2 B3 HH1 W5</b>					
<b>Coastal zone development policy</b>						
<p>P-CZ-1 Require any development proposal in the coastal zone to consider the implications of predicted sea-level rise</p>	<b>HH1 W5</b>					
<b>Coastal zone development objectives</b>						
<p>O-CZ-1 Examine the implications of predicted sea-level rise on existing and proposed infrastructure, establish priorities and take action as appropriate,</p> <p>O-CZ-2 Explore the possibility of designating "no-development zones" and establishing setback lines in coastal zones where there is a substantial risk of flooding due to sea-level rise</p>	<b>HH1 W5 M1</b>					
<b>Flood Prevention Policies</b>						
<p>P-FP-1 Restrict development within 50 m of 'soft' shoreline.</p> <p>P-FP-2 Ensure that no further reclamation of estuary land takes place.</p> <p>P-FP-3 Ensure that no removal of sand dunes, beach sand or gravel is undertaken.</p> <p>P-FP-4 Assess all coastal defence measures for environmental impact.</p> <p>P-FP-5 Facilitate, where possible, the landward migration of the coastal features of the Plan area - such as intertidal flats and marshes, as these features form an integral part of the coastal system - both physically and ecologically.</p> <p>P-FP-6 Land uses shall not give rise to increases in the run-off characteristics above those that currently exist.</p> <p>P-FP-7 Require new developments, where relevant, to integrate appropriate sustainable urban drainage systems (SUDs).</p>	<b>HH1 W5</b>					

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<p>P-FP-8 Avoid development in areas at risk of flooding, particularly floodplains, by not permitting development unless: - it is demonstrated that there are wider sustainability grounds for appropriate development; - the flood risk can be managed to an acceptable level and - where possible, it reduces the overall flood risk.</p> <p>P-FP-9 Adopt a sequential approach to flood risk management, based on avoidance, reduction and then mitigation of flood risk within an overall framework for assessing the location of new development.</p> <p>P-FP-10 Require new development proposals in relevant areas to be accompanied by a flood risk assessment.</p>						
<p><b>Water quality policies</b></p>						
<p>P-WQ-1 Protect, maintain or improve the water quality of Lough Gill and Kilsellagh catchments, the Garavogue River, and all other water bodies in the Plan area to the status required in the Western River Basin District Management Plan (WRBDMP).</p> <p>P-WQ-2 Promote public awareness regarding the protection of water quality and water conservation.</p> <p>P-WQ-3 Ensure that all development proposals have regard to the policies and objectives of the Sligo Groundwater Protection Scheme.</p> <p>P-WQ-4 Discourage additional development within the catchment area of Lough Gill (including Aughamore sub-catchment) and Kilsellagh Reservoir, so as to protect the water quality of these sources.</p> <p>P-WQ-5 Safeguard the drinking water sources of Lough Gill and Kilsellagh by controlling afforestation and agricultural, commercial, industrial and domestic development within their catchments.</p> <p>P-WQ-6 Seek to achieve consistency between development management and environmental pollution control measures to ensure that all development proposals have regard to the policies, objectives and measures detailed in the WRBDMP.</p> <p>P-WQ-7 Require farmers to prepare nutrient management plans in all areas designated as “high risk” in the WRBDMP.</p> <p>P-WQ-8 Protect the quality of estuarine and coastal waters, including designated bathing areas and designated shellfish areas in Sligo Bay, by controlling land-based discharges to these areas. Any significant development in the catchment of a designated shellfish area will require an assessment of the likely impact on shellfish.</p> <p>P-WQ-9 Ensure that all single-house developments outside serviced areas comply with EPA standards and guidelines for effluent treatment.</p> <p>P-WQ-10 Strictly control forestry developments in all areas designated as “high risk” in the WRBDMP.</p> <p>P-WQ-11 Ensure that measures set out in the Action Programmes/ Pollution Reduction Programmes for Shellfish Waters, currently being prepared, are taken into account when zoning /rezoning of lands and development proposals are being considered.</p> <p>P-WQ-12 Ensure that the ongoing development of Sligo City and Environs does not compromise the quality of surface and groundwater and associated species/habitats in the Plan area.</p> <p>P-WQ-13 Ensure that land uses do not give rise to pollution of ground- and surface water during the construction and operation of developments. This shall be achieved by adhering to best practice in the design, installation and management of systems for the interception, collection and appropriate disposal or treatment of all surface waters and effluents.</p>	<p><b>B1 B2 B3 HH1 W1 W2 W3 W4 W5</b></p>					

<b>Water quality objectives</b>						
<p>O-WQ-1 Prepare and enforce Source Protection Plans for drinking water catchments for Lough Gill and Kilsellagh.</p> <p>O-WQ-2 Continue to monitor, audit and review the environmental status with regard to the water quality of rivers, lakes, estuarine and coastal waters.</p> <p>O-WQ-3 Protect, maintain or improve water quality to the status set out in the WRBDMP. All discharges to water bodies and sewers shall be licensed in accordance with the provisions of the Local Government (Water pollution) Acts 1977 &amp; 1990.</p> <p>O-WQ-4 Encourage the establishment of catchment management committees to prepare catchment management plans. These committees should include members of statutory bodies with responsibilities for environmental protection, and members of relevant community groups.</p> <p>O-WQ-5 Implement the Programme of Measures detailed in the WRBDMP.</p> <p>O-WQ-6 Ensure compliance with the relevant objectives and measures that will be set out in the Groundwater Protection Scheme for County Sligo.</p> <p>O-WQ-7 Incorporate in the SEDP (using the Plan variation procedure) the relevant policies and objectives of the WRBDMP and associated Programmes of Measures (when published).</p> <p>O-WQ-8 Ensure that development consents based on this Plan do not - individually or cumulatively - impact on the ability of Rosses Point seawater bathing area to meet the requirements of Directive 2006/7/EC as implemented by the Bathing Water Quality Regulations 2008 (S.I. no. 79/2008).</p>	<p><b>B1 B2 B3</b> <b>HH1 W1</b> <b>W2 W3</b> <b>W4 W5</b></p>					
<b>Waste management policies</b>						
<p>P-WM-1 Comply with the EU and national environmental/waste management legislation.</p> <p>P-WM-2 Implement the relevant provisions of Connaught Regional Waste Management Plan.</p> <p>P-WM-3 Promote the development of facilities in accordance with the waste hierarchy principle which involves a shift toward prevention and minimisation measures, while developing recycling and reuse, disposal with energy recovery and, as the last option, disposal of residual waste to landfill.</p> <p>P-WM-4 Prevent and minimise waste by: a. promotional and educational campaigns; b. continuing promotion of home composting units for biowaste; c. the promotion of the Youngs Quarry Green Garden Waste Facility, Ballisodare; d. diverting some urban biowaste (through the introduction of a third bin for organic household waste) from landfill for bulk treatment and re-use; e. incorporating measures during licensing procedures of industry to encourage minimisation and prevention, wherever possible. f. developing Construction Waste Management Plans, whereby materials chosen for building will focus on reducing environmental impacts and the generation of construction and demolition waste will be minimised.</p> <p>P-WM-5 Apply the polluter pays principle, proximity principle, precautionary principle and the principle of shared responsibility in all waste management initiatives.</p>	<p><b>B1 B2 B3</b> <b>W1 W2</b> <b>W3 W4 S1</b> <b>HH1</b></p>					

<p>P-WM-6 Liaise with/encourage the private sector, semi-state and voluntary groups to actively pursue initiatives involving recycling and/or reuse.</p> <p>P-WM-7 Support the continued provision of a private refuse collection service and segregated domestic waste collection arrangements.</p> <p>P-WM-8 Encourage the recycling of construction and demolition waste and the reuse of aggregates and other materials in future construction projects.</p> <p>P-WM-9 Encourage energy recovery, where possible, by including biogas installations in large sewage treatment facilities.</p> <p>P-WM-10 Support an expanded waste recovery and recycling sector in Sligo in order to service the region's existing and future regional needs.</p> <p>P-WM-11 Encourage the recycling of construction / demolition waste, particularly from local authority projects, as an additional source of aggregates for future developments.</p> <p>P-WM-12 Have regard to the Environmental Protection Agency's National Hazardous Waste Management Plan –2008-2012.</p> <p>P-WM-13 Development proposals on brownfield sites – such as former petrol stations, fuel/chemical storage areas and similar sites – shall be required to undertake an assessment of the potential for contaminated materials, soil, etc. to be unearthed during demolition/development works, and the associated environmental risks. Where any environmental risk is identified, appropriate investigations shall be undertaken to determine the nature and extent of any materials or contaminated soils on the proposed development site. A site specific "remediation plan" shall be prepared to ensure that the construction and operation phases of development do not result in risk to human health, water quality, biodiversity, fisheries, air quality etc.</p> <p>P-WM-14 Ensure that the known waste disposal site at Finisklin is assessed and an appropriate remediation plan is developed and implemented in order to reduce the environmental risk associated with the former landfill.</p>						
<p><b>Waste management objectives</b></p>						
<p>O-WM-1 Increase the number of Recycling Bring Banks from 8 to 15 in the period of the Plan.</p> <p>O-WM-2 Promote the introduction of a third bin for organic waste by the end 2009.</p> <p>O-WM-3 Require the provision of recycling bring-bank facilities as part of major developments – i.e. residential developments in excess of 500 units or other single-use or mixed-use developments with a comparable waste generation potential.</p> <p>O-WM-4 Develop a permanent Household Hazardous Waste Collection Service.</p> <p>O-WM-5 Ensure that all new development provides waste management facilities commensurate with its nature and scale so as to enable the achievement of high levels of recycling as specified in the Connaught Waste Management Strategy.</p> <p>O-WM-6 Continue to carry out the investigation of the landfill site at Finisklin, and complete the management and remediation of the site.</p>	<p><b>S1 HH1</b></p>					



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<p>O-WM-7 In relation to any proposals for development of lands at the Finisklin landfill site, or any other lands that may be contaminated (e.g. reclaimed / filled lands formerly used for port-related activities, or the site of the former Saehan factory at Hazelwood), require the applicants to engage specialist environmental consultants to investigate and assess the presence and extent of contamination, and to recommend remediation measures for agreement with the local authorities.</p> <p>O-WM-8 Require the preparation of Waste Management Plans for the construction stages of developments where deemed necessary.</p> <p>O-WM-9 Maximise the reuse and recycling of Construction and Demolition Waste, including the securing of at least one licensed C&amp;D waste reprocessing site within, or close to, the environs of Sligo.</p>						
<b>Litter control policies</b>						
<p>P-LC-1 Enforce the provisions of the Litter Management Plan 2007–2010 and subsequent Plans.</p> <p>P-LC-2 Support and encourage anti-litter and environmental awareness campaigns, Green Schools and Tidy Towns initiatives, Operation Clean Sweep, and other measures that will positively contribute to the environmental quality of the city.</p>						✓
<b>Air quality and noise policies</b>						
<p>P-AN-1 Support public transport and non-motorised means of travel to improve air quality.</p> <p>P-AN-2 Protect significant tree groups and other vegetation types and encourage landscaping and tree planting as a means of air purification and the filtering of suspended particles.</p> <p>P-AN-3 Encourage a more energy-efficient approach to the design and servicing of buildings for residential, commercial, industrial and other uses, including public buildings.</p> <p>P-AN-4 In conjunction with the EPA, ensure that all existing and new developments are operated in a manner that does not contribute to a deterioration of air quality.</p> <p>P-AN-5 Seek to protect the amenity of dwellings, businesses, community facilities and other existing development, when assessing proposals for development that is likely to generate significant levels of noise and/or odour (e.g. restaurants, take-aways and bars).</p> <p>P-AN-6 Continue to restrict the use of bituminous fuels.</p> <p>P-AN-7 Continue to discourage the unauthorised burning of waste.</p>	HH1 A1 M2 B3					
<b>Major Accident Directive policy</b>						
<p>P-MA-1 Consult with the Health and Safety Authority when assessing proposals for a new Seveso establishment or modifications to an existing establishment, and when assessing proposals for development in the vicinity of existing Seveso establishments.</p>	HH1					
<b>Major Accident Directive objective</b>						
<p>O-MA-1 Maintain appropriate distances between establishments covered by the Major Accidents Directive and residential areas, areas of public use and areas of particular natural sensitivity or interest.</p>	B1 B2 W1 W2 L1 HH1					

## 8.15 Chapter 15: Telecommunications

	Likely to <b>Improve</b> status of SEOs	Probable <b>Conflict</b> with status of SEOs- unlikely to be mitigated	Potential <b>Conflict</b> with status of SEOs- likely to be mitigated	Uncertain interaction with status of SEOs	<b>Neutral</b> interaction with status of SEOs	<b>No Likely</b> interaction with status of SEOs
<b>Energy policies</b>						
P-EN-1 Support the infrastructural development of ESB transmission networks, including the overhead lines required to provide the network needed. P-EN-2 Support national and international initiatives for limiting emissions of greenhouse gases and encourage the sustainable development of renewable energy resources in an appropriate and sustainable manner. P-EN-3 Promote energy conservation and efficiency measures and facilitate innovative building design that promotes energy efficiency in accordance with national policy and guidelines. P-EN-4 Encourage the sustainable development of energy-efficient buildings throughout the plan area.			<b>B1 B2 B3 CH1 L1</b>			
<b>Energy objectives</b>						
O-EN-1 Preserve significant landscape views from the visual intrusion of large-scale telecommunications and energy infrastructure. O-EN-2 Require the placing of electricity cables underground within the urban area of Sligo City. O-EN-3 Seek the extension of the natural gas pipework to Sligo.	<b>L1</b>		<b>CH1</b>			
<b>Telecommunications policies</b>						
P-TEL-1 Achieve a balance between facilitating the provision of telecommunications services in the interest of social and economic progress, sustaining residential amenities and environmental quality. The Local Authorities will have regard to DoEHLG guidelines in regard to this. P-TEL-2 Protect areas of significant landscape, habitats and species importance from the visual and physical intrusion of large-scale telecommunications infrastructure.	<b>B1 B2 B3 L1</b>					
<b>Telecommunications objectives</b>						
O-TEL-1 Support programmes of connectivity throughout the Plan area by liaising with telecommunication service providers. O-TEL-2 Support the Group Broadband Scheme and the School Broadband Access Programme. O-TEL-3 Require, by planning condition, where appropriate, the development of underground telecommunications broadband infrastructure for road, commercial and residential schemes, as set out in the Government's recommendations. O-TEL-4 Have regard to Government guidelines on telecommunications infrastructure, including Telecommunications Antennae and Support Structures – Guidelines for Planning Authorities (DoEHLG, 1996) and any subsequent revisions.			<b>CH1</b>			

## Section 9 Mitigation Measures

### 9.1 Introduction

Mitigation measures are measures envisaged to prevent, reduce and, as fully as possible, offset any significant adverse impacts on the environment of implementing the Development Plan.

Mitigation involves ameliorating significant negative effects. 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. Mitigation measures can be roughly divided into those that: *avoid* effects; *reduce* the magnitude or extent, probability and/or severity of effects; *repair* effects after they have occurred, and; *compensate* for effects, balancing out negative impacts with other positive ones.

The mitigation measures may be incorporated into the briefing of design teams as well as the subsequent design, specification and development management of the landuses to be accommodated on the Plan lands.

Additional and more detailed mitigation measures than those which have been integrated into the Plan - including those detailed below - are likely to be required by the development management and EIA processes for individual projects.

### 9.2 Mitigation through Consideration of Alternatives

A range of potential alternative scenarios for the Plan were identified at an early stage in the process and evaluated for their likely significant environmental effects (see Sections 6 and 7).

The environmental baseline and the Strategic Environmental Objectives (see Sections 3 and 4) were used in order to predict and evaluate the environmental effects of implementing the alternatives.

Communication of the findings of this evaluation helped the Plan-making team to make an

informed choice as to which alternative was to be put before the Elected Members as the proposed draft Plan.

Communication of this evaluation to the Elected Members through this report helped them to make an informed choice with regard to the making of the Plan.

### 9.3 Individual Mitigation Measures integrated into the Plan

The following sub-sections detail how individual mitigation measures have been integrated into the Plan as individual policies or objectives.

The reference codes identified are those which accompany the relevant measures in Section 8 of this report and in the Plan.

The mitigation measures have also been both considered during the preparation of and integrated into the land use zoning contained in the Plan.

#### 9.3.1 Biodiversity and Flora and Fauna

Support achieving the objectives and actions contained in the County Sligo Heritage Plan 2007-2011.

*Integrated through Objective O-H-1.*

Support the objectives of a Local Biodiversity Action Plan for Sligo when prepared.

*Integrated through Objective O-H-2.*

No projects giving rise to significant adverse direct, indirect or secondary impacts on Natura 2000 sites arising from their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted on the

basis of this Plan (either individually or in combination with other plans or projects)<sup>101</sup>.

*Integrated through Policy P-H-21.*

All subsequent plan-making and adoption of plans arising from this plan shall be screened for the need to undertake Appropriate Assessment under Article 6 of the Habitats Directive.

*Integrated through Policy P-H-22.*

Procedures shall be set up to ensure compliance by subsidiary plans with the requirement of Article 6 of the Habitats Directive.

*Omitted from Policy as this is an operational provision.*

Habitat mapping projects which have begun shall be completed and their findings utilised to inform the development management process.

*Integrated through Policy P-H-23.*

No ecological networks or parts thereof which provide significant connectivity between areas of local biodiversity are to be lost without remediation as a result of implementation of the Plan.

*Integrated through Policy P-H-24.*

To progress any City Bypass project or any road project which involves crossing a Natura 2000 site it will be necessary to:-

- Demonstrate the need for the project in light of a do nothing context;
- Examine the potential for intensifying/upgrading existing roads and routes;
- Develop a comprehensive series of plausible alternative routes and design strategies (the latter to include long span and tunnel options);
- Demonstrate that all routes take due account of, and accommodate, ecological considerations and legislative requirements; and,

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<sup>101</sup> Except as provided for in Section 6(4) of the Habitats Directive, viz. There must be:  
(a) no alternative solution available,  
(b) imperative reasons of overriding public interest for the plan to proceed; and  
(c) adequate compensatory measures in place.

- Demonstrate that there will be no incursions onto or adverse effects on these habitats.

*Integrated through Policies P-N2000-1 to P-N2000-5.*

### 9.3.2 Surface and Ground Water Protection

Address the significant water management issues identified in the Water Matters Consultation publication for the Western River Basin District.

*Integrated through Objective O-WS-9.*

When published, the relevant policies and objectives of the Western River Basin Management Plans and associated Programmes of Measures shall be integrated into the Plan through amendment or otherwise.

*Integrated through Objective O-WQ-7.*

Ongoing development of Sligo and Environs shall be undertaken in such a way so as not to compromise the quality of surface water - and associated habitats and species - and groundwater within the zone of influence of the Development Plan area.

*Integrated through Policy P-WQ-12.*

Landuses shall not give rise to the pollution of ground or surface waters during the construction or operation of developments. This shall be achieved through the adherence to best practice in the design, installation and management of systems for the interception, collection and appropriate disposal or treatment of all surface waters and effluents.

*Integrated through Policy P-WQ-13.*

Developments granted permission shall not - individually or cumulatively - impact upon the ability of Rosses Point Seawater Bathing area to meet its requirements under the EU Directive 2006/7/EC on bathing water as implemented by the Bathing Water Quality Regulations 2008 (S.I. No. 79).

*Integrated through Policy O-WQ-8.*



### 9.3.3 Waste Water

Development under the Plan shall be preceded by sufficient waste water treatment and collection infrastructure and capacity.

*Integrated through Policies P-WW-5 and P-WW-6.*

The relevant recommendations set out in *Urban Waste Water Discharges in Ireland for Population Equivalents Greater than 500 Persons – A Report for the Years 2004 and 2005* [Office of Environment Enforcement- EPA, 2007] shall be implemented.

*Integrated through Objective O-WW-13.*

The feasibility of connecting of unsewered, areas including individual properties/ premises, serviced by septic tanks to existing and planned sewer networks shall be examined.

*Integrated through Objective O-WW-14.*

### 9.3.4 Drinking Water

Conformance with the relevant recommendations set out in *The Provision and Quality of Drinking Water in Ireland –A Report for the Years 2006-2007* (Office of Environment Enforcement- EPA, 2007) shall be achieved.

*Integrated through Policy P-WS-5.*

Existing and new populations under the Plan shall be served with clean and wholesome drinking water.

*Integrated through Policy P-WS-1.*

Compliance shall be achieved with the 48 parameters set out under the European Communities (Drinking Water) Regulations (No. 2) 2007.

*Integrated through Policy P-WS-4.*

Any outstanding issues - including the identified inadequate treatment for cryptosporidium at the Kilsellagh Treatment Plant - which would allow the removal of public water supplies from the EPA remedial action list of public water supplies shall be resolved.

*Integrated through Objective O-WS-4.*

Ensure the adequacy of the existing water supply in terms of both quality and quantity and the potential risk to human health.

*Integrated through Policy P-WS-6.*

Prepare a Groundwater Protection Scheme which includes the groundwater bodies within the zone of influence of the Town and Environs Plan area.

*Integrated through Policy P-WQ-3.*

Seek funding for the preparation of a Water Conservation Plan for the Sligo and Environs area.

*Integrated through Objective O-WS-5.*

### 9.3.5 Flooding and Climatic Factors

The EPA's *Climate Change: Scenarios and Impacts for Ireland* report (2003)<sup>102</sup> states that the recommendations outlined by Carter (1990)<sup>103</sup> (subject to one modification) remain a sensible approach to coastal management for sea level change. These recommendations are as follows:

- no new building or new development within 100 m of 'soft' shoreline (Carter (1990) advocated a distance of 50 m);
- no further reclamation of estuary land;
- no removal of sand dunes, beach sand or gravel; and,
- all coastal defence measures to be assessed for environmental impact.

The Plan shall require new developments to comply with these measures.

*Integrated through Policies P-FP-1 to P-FP-4.*

<sup>102</sup> Department of Geography, National University of Ireland, Maynooth (2003) *Environmental RTDI Programme 2000–2006 Climate Change: Scenarios and Impacts for Ireland (2000-LS-5.2.1-M1) Final Report* Wexford: Environmental Protection Agency

<sup>103</sup> Carter, R.W.G. (1990) *Sea level changes*. In: McWilliams, B. (ed.) *Climate Change: Studies on the Implications for Ireland*. pp. 110–151: Dublin: Government of Ireland.

Where possible, the landward migration of the coastal features of the Plan area - such as intertidal flats and marshes - shall be facilitated as these features form an integral part of the coastal system - both physically and ecologically.

*Integrated through Policy P-FP-5.*

Landuses shall not give rise to increases in the run-off characteristics above those that currently exist.

*Integrated through Policy P-FP-6.*

Where relevant, new developments shall be required to integrate adequate and appropriate Sustainable Urban Drainage Systems (SUDS).

*Integrated through Policy P-FP-7.*

Development in areas at risk of flooding, particularly floodplains, shall be avoided by not permitting development in flood risk areas unless where it is fully justified that there are wider sustainability grounds for appropriate development and unless the flood risk can be managed to an acceptable level without increasing flood risk elsewhere and where possible, reducing flood risk overall.

*Integrated through Policy P-FP-8.*

A sequential approach to flood risk management based on avoidance, reduction and then mitigation of flood risk as the overall framework for assessing the location of new development in the development planning processes shall be adopted.

*Integrated through Policy P-FP-9.*

Flood risk assessment shall be incorporated into the process of making decisions on planning applications and planning appeals - flood risk assessments to accompany planning applications where relevant.

*Integrated through Policy P-FP-10.*

### **9.3.6 Soil and Contamination**

Ensure that, where relevant, and, in particular, in the Docklands area, adequate and appropriate investigations are 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.

*Integrated through Policy P-WM-13.*

### **9.3.7 Cultural Heritage**

Landuses shall not give rise to significant losses of the integrity, quality or context of archaeological material - except as may be conditioned or directed by the appropriate heritage agencies. This shall be achieved by the application of appropriate design standards and criteria.

*Integrated through Policy P-AH-11.*

The context, amenity and integrity of archaeological heritage and the landscape at Carns Hill [including the direct intervisibility between cairns on Carns Hill, the direct views between Carns Hill and Knocknarea and Carrowmore and the direct views between Carns Hill and other relevant locations within the wider Cuil Irra passage tombs complex] shall be protected.

*Integrated through Policy P-AH-15.*

Pre-development archaeological testing, surveying, monitoring and recording shall be carried out where appropriate.

*Integrated through Policy P-AH-2.*

In order to protect, strengthen and improve the presentation and the general character of Sligo and Environs, alterations and interventions to Protected Structures shall be executed to a high conservation standards, and shall not detract from their significance or value.

*Integrated through Section 16.2.6 RPS/ACAs in Development Standards Chapter.*

Planning applications for developments in sensitive areas shall be accompanied by an assessment undertaken by an RIAI-accredited architect or practice (or foreign equivalent for non-Irish architects or practices), where appropriate, detailing the impacts of the proposed development upon the special interest and character of the surrounding architectural heritage. The relevant Planning Authority shall be consulted at an early stage in this regard in order to determine whether there is a need for

such an assessment or for specific mitigation measures.

*Integrated through Section 16.2.6  
RPS/ACAs in Development Standards  
Chapter.*

The Record of Protected Structures shall be extended on a phased basis, as appropriate, in order to incorporate recommendations from the National Inventory of Architectural Heritage.

*Integrated through Objective O-BH-1.*

### **9.3.8 Landscape**

Promote linkages between established landmarks and landscape features and views, including recognition of these elements when zoning land and when considering individual development proposals.

*Considered during preparation of land  
use zoning map.*

An appropriate visual impact assessment shall be prepared for any proposed development with potential to significantly impact adversely on the landscape character of the Plan area and adjoining lands using agreed and appropriate viewing points and methods for the assessment.

*Integrated through Policy P-H-25.*

### **9.3.9 Waste Management**

An integrated approach to waste management for proposed developments - to include wastes generated during the construction phase of development and the operation and maintenance phases - shall be implemented, having particular regard to Best Practice Guidelines on the preparation of Waste Management Plan for Construction and Demolition Projects July 2006.

*Integrated through Policies P-WM-13  
and P-WM-14.*

## Section 10 Monitoring Measures

### 10.1 Introduction

The SEA Directive requires that the significant environmental effects of the implementation of plans and programmes are monitored. This environmental report puts forward proposals for monitoring the environmental effects of the Development Plan.

Monitoring enables, at an early stage, the identification of unforeseen adverse effects and the undertaking of appropriate remedial action. In addition to this, monitoring can also play an important role in assessing whether the Plan is achieving its environmental objectives and targets - measures which the Plan can help work towards - whether these need to be reexamined and whether the proposed mitigation measures are being implemented.

### 10.2 Indicators and Targets

Monitoring is based around the indicators which were chosen earlier in the process. These indicators allow quantitative measures of trends and progress over time relating to the Strategic Environmental Objectives used in the evaluation. Focus is given to indicators which are relevant to the likely significant environmental effects of implementing the Plan and existing monitoring arrangements will be used in order to monitor the selected indicators. Each indicator to be monitored will be accompanied by the relevant target(s) which were identified with regard to the relevant legislation (see Section 4).

Table 10.1 below shows the indicator and targets which have been selected with regard to the monitoring of the Plan.

### 10.3 Sources

Measurements for indicators should come from existing monitoring sources and no new monitoring should be required to take place. Existing monitoring sources exist for each of the indicators and include those maintained by Sligo Borough and County Councils and the relevant authorities e.g. the Environmental Protection Agency, the National Parks and Wildlife Service and the Central Statistics Office.

The *Development Management Process* in Sligo Borough and County Councils will provide passive monitoring of various indicators and targets on an application by application basis. Where significant adverse effects - including positive, negative, cumulative and indirect effects - are likely to occur upon, for example, entries to the RMP, entries to the RPS or ecological networks as a result of the undertaking of individual projects or multiple individual projects such instances should be identified and recorded and should feed into the monitoring evaluation.

#### 10.3.1 Excluded Indicators and Targets

As noted on Table 10.1 below, monitoring data on Indicator W3 (Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC) may not be available for the preliminary monitoring evaluation as the groundwater threshold values to which this indicator relates have not yet been identified by the EPA.

In addition, future monitoring data for Indicators A1i (Percentage of population within the plan area travelling to work or school by public transport or non-mechanical means) and A1ii (Average distance travelled to work or school by the population of the Plan area) will not be available until the results of the next CSO Census are made available. It is recommended that data for these indicators be sourced for the SEA of the next review of the Plan.

### 10.4 Reporting

A preliminary monitoring evaluation report on the effects of implementing the Plan will be prepared to coincide with the Manager's report to the elected members on the progress achieved in securing Plan objectives within two years of the making of the plan (this Manager's report is required under section 15 of the 2000 Planning Act).



## 10.5 Responsibility

Sligo Borough and County Councils are responsible for collating existing relevant monitored data, the preparation of a monitoring report, the publication of this report and, if necessary, the carrying out of corrective action.

It is recommended that a Steering Committee be established to oversee the monitoring process.

## 10.6 Thresholds

Thresholds at which corrective action will be considered include the following:

- boil notices on drinking water;
- fish kills;
- complaints received from statutory consultees regarding avoidable impacts resulting from development which is granted permission under the Plan
- court cases taken by the DEHLG regarding impacts upon archaeological heritage including entries to the Record of Monuments and Places; and,
- the failing of Mandatory Standards by bathing waters.

Environmental Component	Selected Indicator(s)	Selected Target(s)	Source
<b>Biodiversity, Flora and Fauna</b>	<p>B1: Percentage of relevant habitats and designated ecological sites lost as a result of implementation of the Plan</p> <p>B2: Number of significant adverse impacts, including direct, cumulative and indirect impacts, to relevant habitats, geological features, species or their sustaining resources in designated ecological sites by development within or adjacent to these sites as a result of implementation of the Plan</p> <p>B3: Percentage loss of connectivity between areas of local biodiversity as a result of implementation of the Plan – as evidenced from a resurvey of CORINE mapping</p>	<p>B1: No losses of relevant habitats, species or their sustaining resources in designated ecological sites as a result of implementation of the Plan</p> <p>B2: No significant adverse impacts, including direct, cumulative and indirect impacts, to relevant habitats, geological features, species or their sustaining resources in designated ecological sites by development within or adjacent to these sites as a result of implementation of the Plan</p> <p>B3: No ecological networks or parts thereof which provide significant connectivity between areas of local biodiversity to be lost without remediation as a result of implementation of the Plan</p>	<p>CORINE Mapping, DEHLG Records &amp; Development Management Process in Sligo Borough and County Councils</p> <p>Development Management Process in Sligo Borough and County Councils &amp; Consultation with the National Parks and Wildlife Service</p> <p>CORINE mapping and habitat mapping for the Town and Environs</p>
<b>Population and Human Health</b>	<p>HH1: Occurrence (any) of a spatially concentrated deterioration in human health</p> <p>HH1ii: Number of non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health</p>	<p>HH1: No spatial concentrations of health problems arising from environmental factors</p> <p>HH1ii: No non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health</p>	<p>Sligo Borough and County Councils, EPA, Health and Safety Authority</p> <p>EPA and Sligo Borough and County Councils</p>
<b>Soil</b>	<p>S1: Area of brownfield land developed over the plan period</p>	<p>S1: Reduced availability of brownfield land (subject to availability on the open market, the demand for such land and the ability for such lands to be sustainably re-used within the provisions of the Plan) at the end of the Plan's lifespan</p>	<p>Development Management Process in Sligo Borough and County Councils</p>

Environmental Component	Selected Indicator(s)	Selected Target(s)	Sources
<b>Water</b>	W1i: Biotic Quality Rating (Q Value)	W1ia: To maintain a biotic quality rating of Q4, in line with the requirement to achieve good water status under the Water Framework Directive, by 2015  W1ib: To improve biotic quality ratings, where possible, to Q5	Environmental Protection Agency
	W1ii: EPA Trophic Status of Lakes	W1iia: To achieve a minimum trophic status of mesotrophic, in line with the requirement to achieve good water status under the Water Framework Directive, by 2015  W1iib: To improve trophic status, where possible, to oligotrophic	Environmental Protection Agency
	W2: Trophic Status (ATSEBI)	W2: To maintain or to improve trophic status, where relevant, to unpolluted in line with the requirement to achieve good water status under the Water Framework Directive, by 2015	Environmental Protection Agency
	W3: Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC	W3: Compliance with Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC	As noted under Section 10.3.1, monitoring data may not be available for this indicator when the monitoring evaluation is being prepared.
	W4: Mandatory and Guide values as set by Directive (76/160/EEC)	W4: To achieve - as a minimum - Mandatory values, and where possible to achieve Guide values as set by Directive (76/160/EEC)	Environmental Protection Agency
	W5: Number of developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk	W5: Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk	Development Management Process in Sligo Borough and County Councils

Environmental Component	Selected Indicator(s)	Selected Target(s)	Sources
<b>Air and Climatic Factors</b>	<p>A1i: Percentage of population within the Plan area travelling to work or school by public transport or non-mechanical means</p> <p>A1ii: Average distance travelled to work or school by the population of the Plan area</p>	<p>A1i: An increase in the percentage of the population travelling to work or school by public transport or non-mechanical means</p> <p>A1ii: A decrease in the average distance travelled to work or school by the population of the Plan area</p>	<p>Central Statistics Office:</p> <p>As noted under Section 10.3.1, future monitoring data may not be available for these indicators until results from the next Census are made available.</p>
<b>Material Assets</b>	<p>M1: Number of new developments granted permission which cannot be adequately served by a public waste water treatment plant over the lifetime of the Plan</p>	<p>M1: No new developments granted permission which cannot be adequately served by a public waste water treatment plant over the lifetime of the Plan</p>	<p>Development Management Process in Sligo Borough and County Councils</p>
<b>Cultural Heritage</b>	<p>CH1: Number of unauthorised developments occurring which result in full or partial loss to entries to the Record of Monuments and Places - including Zones of Archaeological Potential - and the context of the above within the surrounding landscape where relevant</p> <p>CH2i: Number of unauthorised developments occurring which result in physical loss or loss entries to the Record of Protected Structures and/or their context within the surrounding landscape where relevant</p> <p>CH2ii: Number of additions to the Record of Protected Structures and the number of additional ACAs</p>	<p>CH1: No unauthorised developments occurring which result in full or partial loss to entries to the Record of Monuments and Places - including Zones of Archaeological Potential - and the context of the above within the surrounding landscape where relevant</p> <p>CH2i: No unauthorised developments occurring which result in physical loss or loss entries to the Record of Protected Structures and/or their context within the surrounding landscape where relevant</p> <p>CH2ii: Make Additions to the Record of Protected Structures and make additional ACAs, where appropriate</p>	<p>Development Management Process in Sligo Borough and County Councils</p> <p>Development Management Process in Sligo Borough and County Councils</p>



<b>Environmental Component</b>	<b>Selected Indicator(s)</b>	<b>Selected Target(s)</b>	<b>Sources</b>
<b>Landscape</b>	L1: Number of complaints received from statutory consultees regarding avoidable impacts resulting from development which is granted permission under the Plan	L1: No developments permitted which result in avoidable impacts on the Town and Environs' sensitive landscapes	Development Management Process in Sligo Borough and County Councils

**Table 10.1 Selected Indicators, Targets and Monitoring Sources**

## Appendix I Site Synopses

### Special Areas of Conservation<sup>104</sup>

#### Site Name: Lough Gill

#### Site Code: 001976

This site comprises Lough Gill with Doon Lough to the north-east, the Bonet River as far as but not including Glenade Lough, and a stretch of the Owenmore River near Manorhamilton in Co. Leitrim. Lough Gill itself, 2 km east of Sligo town, lies at a geological junction of ancient metamorphic rocks which produce acid groundwater, and limestone which dissolves in the groundwater. The large 8 km long lake has steep limestone shores and underwater cliffs and is over 20m deep in places. The lake appears to be naturally eutrophic, and thus represents a habitat listed on Annex I of the EU Habitats Directive. The site is a candidate SAC selected for alluvial wet woodlands a priority habitat on Annex I of the E.U. Habitats Directive. The site is also selected as a candidate SAC for old Oak woodlands and natural eutrophic lakes, both habitats listed on Annex I of the E.U. Habitats Directive. The site is also selected for the following species listed on Annex II of the same directive - Sea Lamprey, River Lamprey, Brook Lamprey, White-clawed Crayfish, Atlantic Salmon and Otter. The aquatic macrophyte flora is very limited, probably due to the rapid increase in depth around most of the margin. Species such as pondweeds (*Potamogeton* spp.) are present, as well as Shoreweed (*Littorella uniflora*). Where the lake shore has a shallow gradient, some swamp vegetation occurs, mainly dominated by Common Reed (*Phragmites australis*), with Common Club-rush (*Scirpus lacustris*) and sedges (*Carex* spp.). The site contains Old Oak Woodlands, a habitat listed on Annex I of the EU Habitats Directive. These woods are dominated by Oak (*Quercus* spp.), Rowan (*Sorbus aucuparia*) and Willows (*Salix* spp.). Strawberry Tree (*Arbutus unedo*), in its most northerly site in the world, Yew (*Taxus baccata*), in abundance, Bird Cherry (*Prunus padus*), a Red Data Book species, and the nationally scarce Rock Whitebeam (*Sorbus rupicola*) can also be found here. Some areas of conifer plantation occur in association with these woodlands. The site is also notable for the presence of Alluvial Forest, a priority habitat listed on Annex I of the E.U. Habitats Directive, which is found along the banks of the Garvoge River and at the mouth of the Bonet River. These wet woodlands are dominated by Alder (*Alnus glutinosa*) and Willows. Areas of unimproved wet and dry grassland occur within the site, the former particularly by the lake and the latter well developed in the north-east of the site and in the vicinity of O'Rourke's Table. Heath-covered hillsides above the woods are dominated by Heather (*Calluna vulgaris*). Both the woods and the mountains are used by a large herd of Fallow Deer. The site is of considerable importance for the presence of four Red Data Book fish species that are listed on Annex II of the E.U. Habitats Directive - Brook Lamprey (*Lampetra planeri*), River Lamprey (*Lampetra fluviatilis*), Sea Lamprey (*Petromyzon marinus*) and Atlantic Salmon (*Salmo salar*). The Lough Gill system gets a very early run of spring salmon while the Bonet holds stocks of salmon from spring right through to the end of the season. White-clawed Crayfish (*Austropotamobius pallipes*), Otter and Pine Marten are well established on this site, the former, both being Annex II species. The woodlands have a fauna which includes several rare snail species. The site supports

several rare plant species, including Yellow Bird's-nest (*Monotropa hypopitys*), Lady's Mantle (*Alchemilla glaucescens*), Ivy Broomrape (*Orobancha hederaceae*), Black Bryony (*Tamus communis*), Intermediate Wintergreen (*Pyrola media*) and Bird's-nest Orchid (*Neottia nidus-avis*). There is also an unconfirmed record for Melancholy Thistle (*Cirsium helenioides*) from the eastern side of the site. Lough Gill supports only low numbers of wintering waterfowl, mostly Mallard (<150), Tufted Duck (20-30) and Goldeneye (<20). A small colony of Common Terns breed on the islands (20 pairs in 1993), while Kingfishers are found on the lake and rivers. Both of these species are listed on Annex I of the E.U. Birds Directive. A colony of Black-headed Gulls (63 pairs in 1992) occurs with the terns. The woods support a good diversity of bird species including Jay, Woodcock and Blackcap. The site is of importance for three habitats listed on Annex I of the E.U. Habitats Directive, including one with priority status. It is also noted for the high number of rare or scarce animal and plant species. Detailed ecological studies have been carried out on the lake in recent years and a management plan for Lough Gill catchment was produced in 1998 for Sligo County Council. 6.10.2006

#### Site Name: Cummeen Strand/Drumcliff Bay (Sligo Bay)

#### Site Code: 000627

This large coastal site extends from Cullamore in the north-west to Killaspug in the south-west, and from Sligo town in the south-east to Drumcliff village in the north-east. It encompasses two large, shallow bays (Drumcliff Bay and Sligo Harbour), Ardboline and Horse Islands, sand dunes and sand hills at Rosses Point, Killaspug, Yellow Strand and Coney Island, grassland at Ballintemple and Ballygilgan (Lissadell) and a variety of other habitats (woodland, salt marsh, sandy beaches, boulder beaches, shingle, fen, freshwater marshes, rocky sea cliffs, lakes). The site is largely underlain by Carboniferous limestone, but acidic rocks are also found on the Rosses Point peninsula. At Serpent Rock in the north-western section of the site the most complete section of the north-western Carboniferous strata is exposed. Here are found an excellent series of fossilised corals which, in some strata, stand out from the rock matrix. The dominant habitats on the site are estuaries and intertidal sand and mud flats. Sligo Harbour receives the waters of the Garavogue River, which flows from Lough Gill, while Drumcliff Bay receives the Drumcliff River which flows from Glencar Lough. At low tide extensive areas of intertidal flats are exposed in both of these sheltered estuarine bays. The intertidal flats support a diverse macrofauna, with invertebrate species such as lugworm (*Arenicola marina*), cockles (*Cerastoderma edule*), sand mason (*Lanice conchilega*), Baltic tellin (*Macoma balthica*), spire shell (*Hydrobia ulvae*) and mussels (*Mytilus edulis*) being frequent. Of particular note is the presence of eelgrass (*Zostera noltii* and *Z. angustifolia*) beds in both bays. Both estuaries and intertidal flats are of conservation significance and are listed on Annex I of the EU Habitats Directive. Areas of salt marsh fringe both bays in places. Sand dunes, sand hills and dune grassland are found at Rosses Point, Killaspug, Yellow Strand and Coney Island. The dominant species of the dune grassland behind Yellow Strand are Sand Sedge (*Carex arenaria*) and Meadow-grass (*Poa pratensis*), with associated species including Lady's Bedstraw (*Galium verum*), Mouse-ear Hawkweed (*Hieracium pilosella*), Common Milkwort (*Polygala vulgaris*), Common Dog-violet (*Viola riviniana*), Mountain Everlasting

<sup>104</sup> National Parks and Wildlife (various) *Site Synopses for Special Areas of Conservation* Dublin: Government of Ireland

(*Antennaria dioica*), Common Spotted-orchid (*Dactylorhiza fuchsii*), Early Marsh-orchid (*D. incarnata*), Frog Orchid (*Coeloglossum viride*) and Autumn Lady's-tresses (*Spiranthes spiralis*). Embryonic dunes, with characteristic species, including Sand Couch (*Elymus farctus*), occur at the southern end of Rosses Point. Sand dune habitats are rare and threatened in Europe and three types found on the site, embryonic dunes, Marram (*Ammophila arenaria*) dunes and fixed dunes, are listed on Annex I of the E.U. Habitats Directive, the last-named with priority status. Wetlands on the site include Doonweelin Lake, a freshwater lake on the Rosses Point peninsula, which supports interesting vegetation communities that reflect the juxtaposition of the underlying acidic and basic rocks. Ardtermon Fen, a small, floristically-rich area of freshwater marsh, swamp, wet grassland and fen is situated at the back of the Yellow Strand sandhills. The site includes small areas of Hazel (*Corylus avellana*) and Ash (*Fraxinus excelsior*) woodland on limestone (e.g. Cummeen Wood) and several other stands of mixed woodland and wet Willow (*Salix* spp.) woodland (as at Ardtermon Fen). Cliff-top grassland is common in the north-western part of the site. This is dominated by Red Fescue (*Festuca rubra*) and White Clover (*Trifolium repens*), with associated species including Daisy (*Bellis perennis*), Common Bird's-foot-trefoil (*Lotus corniculatus*), Plantains (*Plantago coronopus*, *P. lanceolata* and *P. maritima*), Bulbous Buttercup (*Ranunculus bulbosus*), Common Scurvygrass (*Cochlearia officinalis*), Field Wood-rush (*Luzula campestris*) and Spring Sedge (*Carex caryophyllaea*). The site has a good example of petrifying springs with tufa formations, with several species of bryophyte typical of the Cratoneurion. The springs occur along seepage zones in clay sea cliffs on the northern side of Sligo Harbour. Petrifying springs are listed with priority status on Annex I of the EU Habitats Directive. The site has a very rich and diverse flora, on account of the wide variety of habitats found, and the presence of both basic and acidic substrates. Several rare, Red Data Book species have been recorded from the site, i.e. Rough Poppy (*Papaver hybridum*) which is also listed under the Flora (Protection) Order, 1999, Hoary Whitlowgrass (*Draba incana*) and Yellow Saxifrage (*Saxifraga aizoides*). Both Drumcliff Bay and Cummeen Strand are important for the large numbers of waterfowl which use them in autumn/winter, including Ringed Plover, Redshank, Lapwing, Knot, Bar-tailed Godwit, Oystercatcher, Curlew, Golden Plover, Dunlin, Turnstone, Brent Goose, Grey Heron, Teal, Wigeon, Mallard, Shelduck and Red-breasted Merganser. The fields at Lissadell and Ballintemple support one of the largest populations of Barnacle Goose in the country (c2000 in winters of 1995/96 and 1996/97). Both Drumcliff Bay and Cummeen Strand have been designated as Special Protection Areas under the EU Birds Directive. The important feeding site for Barnacle Geese at Lissadell is a Statutory Nature Reserve. The islands in the north-western section of the site hold important seabird colonies. A Cormorant colony of national importance occurs on Ardboline and Horse Islands, with a total of 261 pairs in 1998. Herring Gull and Great Black-backed Gull also breed on both islands. Common Tern formerly bred on both islands. The islands are also used by Barnacle Geese from the adjacent mainland, which roost or seek refuge here. The low sea cliffs on the adjacent mainland at Ballyconnell and Roskeeragh Points also support small numbers of seabirds and both Black Guillemot and Fulmar nest. Choughs feed in the sandy/grassy areas of the site and one pair is known to nest. Several of the bird species that use the site are listed on Annex I of the EU Birds Directive, i.e. Barnacle Goose, Chough, Golden Plover and Bar-tailed Godwit. Three species listed on Annex II of the EU Habitats Directive are found within this site. Drumcliff Bay, is important for the presence of a large breeding population of Common Seal and Ardboline and Horse Islands on the

western side of the site are also important as haul-out areas for this species. The Marsh Fritillary butterfly is found at Rosses Point, while the rare snail, *Vertigo angustior* has recently been recorded from sand dunes at Killaspugbrone. Cummeen Strand/Drumcliff Bay (Sligo Bay) is an important site of high conservation significance, which includes a wide variety of habitat types, including several listed on Annex I of the EU Habitats Directive, several species listed on Annex II of this directive, large and important populations of waterfowl and seabirds, and several rare plant species. 7.8.2003

#### Site Name: Ballysadare Bay

#### Site Code: 000622

Ballysadare Bay extends for about 10km westwards from the town of Ballysadare, County Sligo and is the most southerly of three inlets of the larger Sligo Bay. The estuarine channel of the Ballysadare River winds its way through the Bay, finally reaching the open sea near the spit at Strandhill Dunes. The Bay is underlain by sedimentary rocks of limestones, sandstones and shales, which are exposed as low cliffs and small sections of bedrock shore at several locations. Knocknarea Mountain overlooks the site. The bay contains extensive intertidal sand and mudflats, approximately 1,500ha in extent. The mud provides an abundance of food for wildfowl, in the form of colonising plants such as Eel Grass (*Zostera marina*) and Tasselweed (*Ruppia maritima*), as well as numerous species of invertebrates on which both wildfowl and waders feed. Well-developed saltmarshes occur at several locations around the bay. Typical species of these areas are Sea Rush (*Juncus maritimus*), Saltmarsh Rush (*Juncus gerardi*), Creeping Bent (*Agrostis stolonifera*) and Parsley Water-dropwort (*Oenanthe lachenalii*). In hollows and ditches, Sea Arrow Grass (*Triglochin maritima*), Sea Club Rush (*Scirpus maritimus*), Sea Milkwort (*Glaux maritima*), Thrift (*Armeria maritima*), Sea Plantain (*Plantago maritima*), Sea Aster (*Aster tripolium*) and Red Fescue (*Festuca rubra*) occur. Particularly interesting species found on the saltmarshes are Flowering Rush (*Butomus umbellatus*), Slender Spike-rush (*Eleocharis uniglumis*) and Hard Grass (*Parapholis strigosa*). There is a large sand dune system at Strandhill which has been relatively undisturbed by grazers. The dune system is highly dynamic, with the tip of the peninsula actively growing and displaying a good, though limited, example of embryonic shifting dunes. The characteristic species found in this habitat type include Couch Grass (*Elymus farctus*), Spear-leaved Orache (*Atriplex prostratus*) and Sea Rocket (*Cakile maritima*). Shifting marram dunes are fairly extensive in area, occurring along the entire seaward side of the spit and are especially active towards the tip. While Marram (*Ammophila arenaria*) is the dominant species, Colt's Foot (*Tussilago farfara*), Red Goosefoot (*Chenopodium rubrum*) and Cat's-ear (*Hypochoeris radicata*) can also be found. The seaward dunes reach considerable heights (up to 20m). They are very steep on the seaward edge, but to the east of this there is an undulating expanse of dune hills. The largest proportion of the dune system is made up of fixed dunes, a priority habitat listed on Annex I of the EU Habitats Directive. In from the marram dunes, there is a low-growing, closed sward which is particularly species rich, with Field Wood-rush (*Luzula campestris*), Kidney Vetch (*Anthyllis vulneraria*), Bee Orchid (*Ophrys apifera*), Oxeye Daisy (*Leucanthemum vulgare*), Common Centaury (*Centaurea erythraea*), Thyme (*Thymus praecox*), Harebell (*Campanula rotundifolia*), Burnet Rose (*Rosa pimpinellifolia*), Carlina Thistle (*Carlina vulgaris*) and Fairy Flax (*Linum catharticum*). The fixed dune areas are also rich in bryophytes and lichens. Moss species include *Tortula ruraliformis*, *Homalothecium lutescens*, *Ditrichum flexicaule* and *Hypnum cupressiforme*, while lichens (*Peltigera* spp. and *Cladonia* spp.) are also present. Some humid dune slacks occur amongst the fixed

dunes. Characteristic species include Creeping Willow (*Salix repens*), Carnation Sedge (*Carex panicea*), Marsh Helleborine (*Epipactis palustris*) and Jointed Rush (*Juncus articulatus*). A range of habitats fringe the Bay, adding diversity. Some of these areas have particular features of interest, e.g. the old oyster farm at Tanrego is important for waterfowl, while the uncommon plant species, Ivy Broom (*Orobancha hederacea*), occurs in scrubland adjacent to the bay. Ballysadare Bay is important for a range of waterfowl species in autumn and winter and is part of the larger Sligo Bay complex. Brent Geese occur in internationally important numbers while a further seven species have populations of national importance. These are as follows, with numbers referring to the average peaks over winters 1994/95 - 1997/98: Brent Goose (259), Red-breasted Merganser (48), Oystercatcher (796), Grey Plover (231), Dunlin (1129), Bar-tailed Godwit (431), Redshank (481) and Greenshank (24). The presence of Bar-tailed Godwit and also smaller numbers of Golden Plover (66) is of particular note as these species are listed on Annex I of the EU Birds Directive. Two animals listed on Annex II of the EU Habitats Directive occur within the site: the Bay supports a colony of Common Seals, with up to 170 adults recorded here at one time; and the rare snail, *Vertigo angustior*, occurs in dune slacks or hollows at Strandhill. The Bay is little used for fishing or boating, but marsh shooting is common in the upper reaches of the Bay. Aquaculture is little developed in this bay compared to nearby Sligo and Drumcliff Bays. Dune systems are sensitive to developments which alter their structure. Grazing is also a critical factor: the correct level of grazing maintains an open, species-rich sward, but the presence of too many grazers causes damage to the vegetation and may exacerbate dune erosion. Agricultural improvement, and particularly the application of fertilisers, threatens dune vegetation, leading to the eventual loss of species diversity. Ballysadare Bay is of ecological value for its range of good quality coastal habitats. Actively developing dune systems are rare on the west coast and the sand dune system at Strandhill is of particular interest as a large and intact example of a habitat type which is under general threat from development. The rarity of intact dune systems is recognised in the listing of "Fixed Dunes" as priority habitat on Annex I of the EU Habitats Directive. The saltmarshes at Ballysadare Bay are relatively good examples for the west coast and that at Abbeytown is unusual as it is forming on quarry waste. The presence of two Annex II species within the site adds further importance. Furthermore, the bay supports nationally important numbers of waterfowl.

15.10.2001

## Special Protection Areas<sup>105</sup>

### Site Name: Ballysadare Bay

Site Code: 004129

Ballysadare Bay extends for about 10km westwards from the town of Ballysadare, County Sligo and is the most southerly of three inlets of the larger Sligo Bay complex. The estuarine channel of the Ballysadare River winds its way through the bay, finally reaching the open sea near the spit at Strandhill Dunes. The bay is underlain by sedimentary rocks of limestones, sandstones and shales, which are exposed as low cliffs and small sections of bedrock shore at several locations. The bay contains extensive intertidal sand and mudflats. The flats support good populations of macro-invertebrates which are important food items for wintering waterfowl. Common species include the polychaete worms *Hediste diversicolor*, *Arenicola marina*, *Janicea conchilega* and

*Nephtys hombergii*, and the bivalves *Cerastoderma edule*, *Macoma balthica* and *Scrobicularia plana*. Also present on the intertidal flats are the vascular plants Eelgrass (*Zostera marina*) and Beaked Tasselweed (*Ruppia maritima*), which provide food for herbivorous wildfowl. Well-developed salt marshes, which provide roosting sites for birds at high tide, occur at several locations around the bay. Typical species of these areas are Sea Rush (*Juncus maritimus*), Saltmarsh Rush (*J. gerardi*), Sea Arrowgrass (*Triglochin maritima*), Sea Milkwort (*Glaux maritima*) and Red Fescue (*Festuca rubra*). There is a large sand dune system at Strandhill. The dune system is highly dynamic, with the tip of the peninsula actively growing and displaying a good, though limited, example of embryonic shifting dunes. The sandy beaches around the peninsula are used by roosting birds. The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Light-bellied Brent Goose, Grey Plover, Dunlin, Bar-tailed Godwit and Redshank. The E.U. Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetlands & Waterbirds. Ballysadare Bay is important for a range of waterfowl species in autumn and winter. Counts over four winters in the period 1995/96 to 1999/00 showed that the population of Light-bellied Brent Goose (188) meets the qualifying level for international importance. The populations of five other species are of national importance, i.e. Grey Plover (70), Dunlin (1,420), Bar-tailed Godwit (251), Redshank (435) and Greenshank (22) - figures are the average peaks. A range of other species occur in regionally important concentrations - these include Cormorant (43), Shelduck (55), Wigeon (617), Teal (179), Mallard (304), Red-breasted Merganser (26), Oystercatcher (516), Ringed Plover (96), Golden Plover (301), Lapwing (467), Curlew (508) and Turnstone (40). It also supports populations of Goldeneye (17), Black-headed Gull (261) and Common Gull (174). A small flock of Whooper Swan (15) occurs. A colony of Common Seals, a species listed on Annex II of the E.U. Habitats Directive occur within the site, with up to 170 adults recorded here at one time. The bay is little used for fishing or boating, but marsh shooting is common in its upper reaches. Aquaculture is little developed here compared to nearby Sligo Harbour and Drumcliff Bay. The wintering bird populations are monitored annually as part of I-WeBS. Ballysadare Bay SPA is of high ornithological importance; it supports a Light-bellied Brent Goose population of international importance as well as nationally important populations of five other species of wintering waterfowl. The presence of Bar-tailed Godwit, Golden Plover and Whooper Swan is of particular note as these species are listed on Annex I of the E.U. Birds Directive. The site forms an important component of the larger Sligo Bay complex.

2.10.2007

### Site Name: Drumcliff Bay

Site Code: 004013

Drumcliff Bay is the most northerly of Sligo Bay's three estuarine inlets. The bay comprises an inner sheltered estuarine area and an outer area of shallow marine water. It extends along a 9 km east to west axis from Drumcliff village to Raghy Point. Drumcliff Bay is the estuary of the Drumcliff River, a substantial river flowing from Glencar Lough to the east. The inner part of Drumcliff Bay is well-sheltered by a sandy/grassy peninsula extending north from Rosses Point. The northern part of the bay is fringed by fine sandy beaches - Ballygilgan Strand, Lissadell Strand, Ardtermon Strand. Some salt marsh occurs in the sheltered inner areas. At low tide extensive intertidal flats are exposed. These support a diverse macro-invertebrate fauna, with such species as Lugworm (*Arenicola marina*), the

<sup>105</sup> National Parks and Wildlife (various) *Site Synopses for Special Protection Areas* Dublin: Government of Ireland



polychaete Catworm (*Nephtys hombergi*), Cockle (*Cerastoderma edule*), Baltic Tellin (*Macoma balthica*), Peppery Furrow-shell (*Scrobicularia plana*), Spire Shell (*Hydrobia ulvae*) and occasional banks of Mussels (*Mytilus edulis*). A bed of Dwarf Eelgrass (*Zostera noltii*) occurs near the south-eastern corner of the bay. The site includes goose-feeding fields of improved grassland at Ballygilgan and Ballintemple. Some mixed woodland is also included within the site. Drumcliff Bay SPA is of importance for the diversity of wintering waterfowl and is an integral part of the larger unit of Sligo Bay. Its principal importance, however, is that it supports an internationally important population of Barnacle Goose (1,800 in spring 1999, 2,300 in spring 2003), which is one of the two largest flocks in the country (over 20% of the national total). The geese feed on the fields of improved grassland at Ballygilgan and Ballintemple and at times roost in the adjacent bay. A flock of Whooper Swan of local/regional importance (34 birds) occurs with the geese (figures given are average peaks for the 4 winters 1997/98-2000/01). The site also supports a nationally important population of Sanderling (278), which represents 3.0% of the national total, and of Bar-tailed Godwit (202). The populations of Long-tailed Duck (19) and Bar-tailed Godwit (172) at times exceed the threshold for national importance. Other species which occur regularly include Brent Goose (36), Shelduck (46), Wigeon (144), Teal (62), Red-breasted Merganser (21), Oystercatcher (241), Ringed Plover (83), Lapwing (173), Knot (34), Dunlin (273), Curlew (146), Redshank (91) and Greenshank (9). More intensive survey may show that higher numbers of some of these species occur. Drumcliff Bay has a population of Common Seal, a species that is listed on Annex II of the E.U. Habitats Directive. A small part of the goose feeding fields is a Nature Reserve and part of Drumcliff Bay is a Wildfowl Sanctuary. There are no significant imminent threats to the wintering bird populations. Shellfish farming, however, occurs in the bay on a large scale and could cause localised disturbance to sediments and to the wintering birds. Drumcliff Bay SPA is of international importance on account of the population of Barnacle Goose it supports. It also has a nationally important population of Sanderling and Bar-tailed Godwit, and supports a good diversity of other waterfowl species. Of note is that three of the species which occur regularly (Barnacle Goose, Whooper Swan, Bar-tailed Godwit) are listed on Annex I of the E.U. Birds Directive).

3.10.2006

**Site Name: Cummeen Strand SPA**  
**Site Code: 004035**

Cummeen Strand is a large shallow bay stretching from Sligo town westwards to Coney Island. It is one of three estuarine bays within Sligo Bay, with Drumcliff Bay to the north and Ballysadare Bay to the south. The Garavogue River flows into the bay and forms a permanent channel. At low tide, extensive sand and mud flats are exposed. These support a diverse macro-invertebrate fauna which provide the main food supply for the wintering waterfowl. Invertebrate species such as Lugworm (*Arenicola marina*), Ragworm (*Hediste diversicolor*), Cockles (*Cerastoderma edule*), Sand Mason (*Lanice conchilega*), Baltic Tellin (*Macoma balthica*), Spire Shell (*Hydrobia ulvae*) and Mussels (*Mytilus edulis*) are frequent. Of particular note is the presence of eelgrass (*Zostera noltii* and *Z. angustifolia*) beds, which provide a valuable food stock for herbivorous wildfowl. The estuarine and intertidal flat habitats are of conservation significance and are listed on Annex I of the E.U. Habitats Directive. Areas of salt marsh fringe the bay in places and provide roosting sites for birds during the high tide periods. Sand dunes occur at Killaspug Point and Coney Island, with a shingle spit at Standalone Point near Sligo Town. The site is a Special Protection Area (SPA) under the

E.U. Birds Directive, of special conservation interest for the following species: Light-bellied Brent Goose, Oystercatcher and Redshank. The E.U. Birds Directive pays particular attention to wetlands, and as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds. Cummeen Strand is of ornithological importance for supporting important concentrations of wintering waterfowl. The site supports an Internationally Important Brent Goose flock (235) and Nationally Important populations of Oystercatcher (648) and Redshank (325). Other species occurring in significant numbers include Shelduck (53), Wigeon (121), Teal (43), Mallard (121), Red-breasted Merganser (12), Golden Plover (502), Lapwing (670), Knot (96), Sanderling (26), Dunlin (508), Bar-tailed Godwit (63), Curlew (405), Greenshank (14) and Turnstone (56) - population sizes are the mean of peak counts for the 5 years, 1996/97 – 2000/01. Whooper Swan (6) also uses the site, though not regularly. The regular presence of Golden Plover and Bar-tailed Godwit is of particular note as these species are listed on Annex I of the E.U. Birds Directive. This site is of high ornithological importance, with one species occurring in numbers of International Importance and two in numbers of National Importance. In addition, two of the species that regularly occur are listed on Annex I of the E.U. Birds Directive. The site is also important as a component of the much larger Sligo Bay complex.

10.1.2007

## Proposed Natural Heritage Areas

**Site Name: Lough Gill**  
**Site Code: 001976**

Site synopsis for Lough Gill proposed NHA is the same as for site synopsis for Lough Gill SAC.

**Site Name: Cummeen Strand/Drumcliff Bay (Sligo Bay)**  
**Site Code: 000627**

Site synopsis for Cummeen Strand/Drumcliff Bay proposed NHA is the same as for site synopsis for Cummeen Strand/Drumcliff Bay SAC.

**Site Name: Ballysadare Bay**  
**Site Code: 000622**

Site synopsis for Ballysadare Bay proposed NHA is the same as for site synopsis for Ballysadare Bay SAC.