

## Section 5 Strategic Environmental Objectives

### 5.1 Introduction

Strategic Environmental Objectives (SEOs) are methodological measures developed from policies which generally govern environmental protection objectives established at international, Community or Member State level e.g. the environmental protection objectives of various European Directives which have been transposed into Irish law and which are required to be implemented.

The SEOs are set out under a range of topics and are used as standards against which the provisions of the Plan and the alternatives are evaluated in order to help identify which provisions would be likely to result in significant environmental effects and where such effects would be likely to occur, if - in the case of adverse effects - unmitigated.

SEOs are distinct from the objectives of the Plan - although they will often overlap - and they are not given statutory weight by virtue of their use in Strategic Environmental Assessments.

The SEOs are linked to indicators which can facilitate monitoring the environmental effects of the Plan as well identifying targets which the Plan can help work towards.

SEOs were developed taking into account feedback provided by the environmental authorities.

Note that other legislation, plans, programmes, etc. which are not listed above and which have been taken into account include those which are detailed throughout this report including at Sections 2.5, Section 4 and Section 9.

### 5.2 Biodiversity, Flora and Fauna

#### 5.2.1 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.

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.

The Habitats Directive establishes Natura 2000, a network of protected areas throughout the EU. SACs together with Special Protection Areas (SPAs) - which are designated under the 1979 Birds Directive - make up the Natura 2000 network of protected sites.

Article 6 of the Habitats Directive provides for the need to undertake Appropriate Assessments of plans or projects which have the potential to impacts upon Natura 2000 sites.

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.

In Ireland, the habitats and species occurring in both SACs and SPAs 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 impact on the protected site in question, including direct, cumulative and indirect impacts, an Appropriate Assessment is required.

The integration of the requirements of Article 6 of the Habitats Directive into the Planning and Development Act 2000 as amended and the European Communities (Birds and Natural Habitats) Regulations 2011 puts the

requirement for Appropriate Assessment into context for both projects and plans.

### **5.2.2 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 - seeks 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 to regulate the exploitation of these species.

The Directive places great emphasis on the protection of habitats for endangered as well as migratory species, especially through the establishment of a coherent network of Special Protection Areas (SPAs).

SPAs are protected under the Directive and have been designated in Ireland by the Department of Arts, Heritage and the Gaeltacht due to their conservation value for birds of importance in the European Union.

The Annexes to the Birds Directive have been adapted on a number of occasions in response to scientific and technical progress and to the successive enlargements of the European Union. Directive of 30 November 2009 on the conservation of wild birds (2009/147/EC) (contains the most up to date annexes).

### **5.2.3 European Communities (Birds and Natural Habitats) Regulations 2011**

The European Communities (Birds and Natural Habitats) Regulations 2011 consolidate the European Communities (Natural Habitats) Regulations 1997 to 2005 and the European Communities (Birds and Natural Habitats)(Control of Recreational Activities) Regulations 2010, as well as addressing transposition failures identified in the CJEU judgements.

The Regulations have been prepared to address several judgments of the Court of Justice of the European Union (CJEU) against Ireland, notably cases C-418/04 and C-183/05, in respect of failure to transpose elements of the Birds Directive and the Habitats Directive into Irish law.

### **5.2.4 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.

### **5.2.5 National Biodiversity Plan 2011**

The preparation and implementation of Ireland's 2<sup>nd</sup> National Biodiversity Plan 2011<sup>20</sup> 'Actions for Biodiversity 2011 – 2016' complies with an obligation under the UN Convention on Biological Diversity. The Plan has been developed in line with the EU and International Biodiversity strategies and policies.

The measures Ireland will take are presented as 102 actions under a series of 7 Strategic Objectives. Some of the actions within the plan are continuing elements of existing work and many are requirements under existing EU Directives. The objectives cover the conservation of biodiversity in the wider countryside and in the marine environment, both within and outside protected areas; the mainstreaming of biodiversity across the decision making process in the State; the strengthening of the knowledge base on biodiversity; increasing public awareness and participation; and Ireland's contribution to international biodiversity issues, including North South co-ordination on issues of common interest.

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

The basic designation for wildlife is the Natural Heritage Area (NHA). 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. Under the Wildlife Amendment Act (2000), NHAs are legally protected from damage from the date they are formally proposed for designation. Proposed NHAs (pNHAs) were published on a non-

<sup>20</sup> Department of Arts, Heritage, Gaeltacht and the Islands (2002) *National Biodiversity Plan* Dublin: Government of Ireland

statutory basis in 1995, but have not since been statutorily proposed or designated - designation will proceed on a phased basis over the coming years.

The Planning and Development Act 2000 as amended defines a 'wildlife site' as:

- (a) an area proposed as a natural heritage area and the subject of a notice made under section 16(1) of the Wildlife (Amendment) Act 2000,
- (b) an area designated as or proposed to be designated as a natural heritage area by a natural heritage area order made under section 18 of the Wildlife (Amendment) Act 2000,
- (c) a nature reserve established or proposed to be established under an establishment order made under section 15 (amended by section 26 of the Wildlife (Amendment) Act 2000) of the Wildlife Act 1976,
- (d) a nature reserve recognised or proposed to be recognised under a recognition 5 order made under section 16 (amended by section 27 of the Wildlife (Amendment) Act 2000) of the Wildlife Act 1976, or
- (e) a refuge for fauna or flora designated 10 or proposed to be designated under a designation order made under section 17 (amended by section 28 of the Wildlife (Amendment) Act 2000) of the Wildlife Act 1976.

## 5.2.7 County Biodiversity Plan

'Treasuring our Wildlife', the Dún Laoghaire-Rathdown Biodiversity Plan, was published in 2009. The Plan identifies areas which are important for biodiversity, threats posed to these areas and lists of targets for the County's biodiversity including the completion of a County Habitats Survey.

The County Biodiversity Plan is supported by other Council documents including the Dún Laoghaire-Rathdown Tree Strategy 2011-2015.

## 5.2.8 (Draft) National Peatlands Strategy

The Draft National Peatlands Strategy, prepared by the National Parks and Wildlife

Service, will, when finalised, establish principles in relation to Irish peatlands in order to guide Government policy. The Strategy aims to provide a framework for which all of the peatlands within the State can be managed responsibly in order to optimise their social, environmental and economic contribution.

## 5.2.9 SEOs, Indicators and Targets

<b>SEO B1:</b>	To ensure compliance with the Habitats and Birds Directives with regard to the protection of Natura 2000 Sites and Annexed habitats and species <sup>21</sup>
<b>Indicator B1:</b>	Conservation status of habitats and species as assessed under Article 17 of the Habitats Directive
<b>Target B1:</b>	Maintenance of favourable conservation status for all habitats and species protected under National and International legislation to be unaffected by implementation of the Plan <sup>22</sup>

<sup>21</sup> 'Annexed habitats and species' refer to those listed under Annex I, II & IV of the EU Habitats Directive and Annex I of the EU Birds Directive.

<sup>22</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.

<b>SEO B2:</b>	To ensure compliance with Article 10 of the Habitats Directive with regard to the management of features of the landscape which - by virtue of their linear and continuous structure or their function act as stepping stones (designated or not) - are of major importance for wild fauna and flora and essential for the migration, dispersal and genetic exchange of wild species
Indicator B2:	Percentage loss of functional connectivity without remediation resulting from development provided for by the Plan
Target B2:	No significant ecological networks or parts thereof which provide functional connectivity to be lost without remediation resulting from development provided for by the Plan

<b>SEO B3:</b>	To avoid significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites <sup>23</sup> and to ensure compliance with the Wildlife Acts 1976-2010 with regard to the protection of listed species
Indicator B3i:	Number of significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites resulting from development provided for by the Plan
Target B3i:	Avoid significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites resulting from development provided for by the Plan
Indicator B3ii:	Number of significant impacts on the protection of listed species
Target B3ii:	No significant impacts on the protection of listed species

## 5.3 Population and Human Health

### 5.3.1 Population

The new population provided for in the Plan will interact with various environmental components. Potential interactions include:

- Recreational and development pressure on habitats and landscapes - consideration of SEOs B1, B2 and B3 (see Section 5.2.9) cover this issue;
- Increase in demand for waste water treatment at the municipal level - consideration of SEO M1 (see Section 5.6.6) covers this issue;

<sup>23</sup> The Planning and Development Act 2000 as amended defines a 'wildlife site'. See Section 5.2.7.

- Increase in demand for water supply - consideration of SEO M2 (see Section 5.6.6) covers this issue;
- Potential development in flood-sensitive areas - consideration of SEO W3 (see Section 5.5.7) covers this issue; and
- Effect on water quality - consideration of SEOs W1 and W2 (see Section 5.5.7) cover this issue.

Description of land use plans relating to population are provided under Section 2.5.

## 5.3.2 Human Health

### 5.3.2.1 Overview

The impact of implementing the Plan on human health is determined by the impacts which the Plan will have upon 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. Impacts would be influenced by the extent to which new development is accompanied by appropriate infrastructure - this relates to SEOs M1 and M2; Impacts upon the quality of water bodies - these relate to SEOs W1 and W2; and the extent of development provided which would affect flood risk - this relates to SEO W3.

### 5.3.2.2 Emission Limits

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 plan 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.

## 5.3.3 SEO, Indicator and Target

**SEO PHH1:** To protect populations and human health from exposure to incompatible landuses

**Indicator PHH1:** Occurrence (any) of a spatially concentrated deterioration in human health arising from environmental factors resulting from development provided for by the Plan, as identified by the Health Service Executive and Environmental Protection Agency

**Target PHH1:** No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan

## 5.4 Soil

### 5.4.1 Overview

Soil is potentially subject to a series of threats including erosion, decline in organic matter, local and diffuse contamination, sealing, compaction, decline in biodiversity, salinisation, floods and landslides.

Given the importance of soil and the need to prevent further soil degradation, the Sixth Environment Action Programme<sup>24</sup> called for the development of a Thematic Strategy on Soil Protection.

<sup>24</sup> Decision No 1600/2002/EC of the European Parliament and of the Council of 22<sup>nd</sup> July 2002 laying down the Sixth Community Environment Action Programme (OJ L 242, 10.9.2002, p. 1).

## 5.4.2 SEO, Indicator and Target

<b>SEO S1:</b>	To avoid damage to the hydrogeological and ecological function of the soil resource
Indicator S1:	Soil extent and hydraulic connectivity
Target S1:	To minimise reductions in soil extent and hydraulic connectivity

## 5.5 Water

### 5.5.1 The Water Framework Directive 2000

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.

### 5.5.2 Quality Standards for Surface Waters

The European Communities Environmental Objectives (Surface Waters) Regulations 2009 (SI No. 272 of 2009) is the final major piece of legislation needed to support the WFD and gives statutory effect to Directive 2008/105/EC on environmental quality standards in the field of water policy. The Surface Waters Regulations also give further effect to the WFD, establishing a framework for Community action in the field of water policy and Directive 2006/11/EC on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community.

The Surface Waters Regulations apply to all surface waters - including lakes, rivers, canals, transitional waters, and coastal waters - and provide, inter alia, for:

- The establishment of legally binding quality objectives for all surface

- waters and environmental quality standards for pollutants;
- The examination and where appropriate, review of existing discharge authorisations by Public Authorities to ensure that the emission limits laid down in authorisations support compliance with the new water quality objectives/standards;
- The classification of surface water bodies by the EPA for the purposes of the Water Framework Directive;
- The establishment of inventories of priority substances by the EPA, and;
- The drawing up of pollution reduction plans by coordinating local authorities (in consultation with the EPA) to reduce pollution by priority substances and to cease and/or phase out discharges, emissions or losses of priority hazardous substances.

In order to satisfy the overall WFD objective of 'good status', a surface water body must achieve the requirements of the good ecological<sup>25</sup> and chemical<sup>26</sup> status.

The EU's Common Implementation Strategy Guidance Document No. 20 provides guidance on exemptions to the environmental objectives of the Water Framework Directive.

### 5.5.3 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 Directive (Directive 2006/118/EC on the protection of groundwater against pollution and deterioration).

This Directive sets up environmental objectives of good groundwater quantity and good groundwater quality (chemical status), as well

<sup>25</sup> Ecological status comprises: biological quality elements, physiochemical conditions and hydromorphological quality elements. The overall ecological status of the water body is determined by the lowest level of status achieved across all quality elements.

<sup>26</sup> Chemical status assessment is based on compliance with the standards laid down for priority substances by Directive 2008/105/EC on environmental quality standards in the field of water policy (the Surface Waters Regulations give effect to the environmental standards established by this Directive).

as ensuring a continuity to the 1980 Groundwater Directive (Directive 80/68/EEC on the protection of groundwater against pollution caused by dangerous substances).

Article 3 of the 2006 Directive requires 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>27</sup>, including their relevant metabolites, degradation and reaction products - 0,1 µg/l and 0,5 µg/l (total<sup>28</sup>).

Irish groundwater threshold values<sup>29</sup> are currently in the process of being set by the EPA.

### 5.5.4 Eastern River Basin Management Plan

Dún Laoghaire-Rathdown is located within the Eastern River Basin District for which a River Basin Management Plan and a Programme of Measures are being implemented in order to

<sup>27</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.

<sup>28</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>29</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.

enable the achievement of the requirements of the WFD.

### 5.5.5 Bathing Water

The Bathing Water Directive (2006/7/EC) - which entered into force in March 2008 - revises the 1976 Bathing Water 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.

Mandatory and Guide Values are set out for bathing waters in the Directive and transposing Regulations. 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.

### 5.5.6 Flooding

#### 5.5.6.1 EU Floods Directive

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.

The Directive requires Member States to carry out a preliminary assessment 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 2017 flood risk management plans focused on prevention, protection and preparedness must be established.

The Directive is to be carried out in coordination with the Water Framework Directive and Flood Risk Management Plans and River Basin Management Plans should be coordinated.

#### 5.5.6.2 DEHLG/OPW Flood Risk Management Guidelines

In November 2009 the DEHLG/OPW issued *The Planning System and Flood Risk*

*Management Guidelines for Planning Authorities.* These are aimed at ensuring a more consistent, rigorous and systematic approach which will fully incorporate flood risk assessment and management into the planning system.

The Guidelines require the planning system to, among other things:

- Avoid development in areas at risk of flooding, particularly flood plains, unless there are proven sustainability grounds that justify appropriate development and where flood risk can be reduced or managed to an acceptable level, without increasing flood risk elsewhere;
- Adopt a sequential approach to flood risk management when assessing the location for new development based on avoidance, reduction and mitigation of flood risk; and
- Incorporate flood risk assessment into the process of making decisions on planning applications and planning appeals.

#### 5.5.6.1 Strategic Flood Risk Assessment

Appendix 13 to the County Development Plan contains the findings of a Strategic Flood Risk Assessment (SFRA) which has been undertaken by the Council in response to requirements contained in the flood risk management guidelines.

### 5.5.7 SEOs, Indicators and Targets

Note that SEOs W1 and W2 also interact with the quality of soils.

<b>SEO W1:</b>	To maintain and improve, where possible, the quality and status of surface waters
Indicator W1i:	Classification of Overall Status (comprised of ecological and chemical status) under the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (SI No. 272 of 2009)
Target W1i:	Not to cause deterioration in the status of any surface water or affect the ability of any surface water to achieve 'good status' <sup>30</sup>
Indicator W1ii:	Mandatory and Guide values as set by the EU Bathing Water Directive and transposing Bathing Water Quality Regulations (SI No. 79 of 2008)
Target W1ii:	To achieve - as a minimum - Mandatory values and, where possible, to achieve Guide values as set by the EU Bathing Water Directive and transposing Bathing Water Quality Regulations (SI No. 79 of 2008)

<sup>30</sup> Good status as defined by the WFD equates to approximately the following in the current national schemes of classification as set out by the EPA:

- *Q4* in the biological classification of *rivers*;
- and
- *Unpolluted status* in the Assessment of Trophic Status of Estuaries and Bays in Ireland (ATSEBI).

<b>SEO W2:</b>	To prevent pollution and contamination of ground water
Indicator W2:	Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC
Target W2:	Not to affect the ability of groundwaters to comply with Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC

<b>SEO W3:</b>	To comply as appropriate with the provisions of the Planning System and Flood Risk Management: Guidelines for Planning Authorities (DEHLG, 2009)
Indicator W3:	Number of incompatible developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk
Target W3:	Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk in compliance with <i>The Planning System and Flood Risk Management Guidelines for Planning Authorities</i>

## 5.6 Material Assets

### 5.6.1 Water Services Act 2007

Major legislative revisions have been provided for in the Water Services Act 2007. Water Services Act 2007 (No. 30 of 2007). The Act incorporates a comprehensive review, update and consolidation of all existing water services legislation, and facilitates the establishment of a comprehensive supervisory regime to ensure compliance with specified performance standards.

### 5.6.2 Water Services Act 2013

The Water Services Act 2013 provides for the establishment of Irish Water as a subsidiary of Bord Gáis Éireann. The Act provides the Commission for Energy Regulation with a function to advise the Government in relation to the development of policy regarding the regulation of the provision of water services. The Act provides that the Commission may do all things necessary in preparation for the performance of water regulatory functions and that the Commission may undertake the necessary consultations with Bord Gáis Éireann and Irish Water, water services authorities, or any other person.

In the medium-to-long-term Irish Water will produce and implement a series of 6 year Multi-Annual Capital Investment Plans which will synchronise with the 6 year River Basin Management Plan (RBMP) cycles. The 6 year Capital Investment Plans are to be guided by a 25-year Water Services Strategic Plan (WSSP) which is required to focus on how capacity deficits will be addressed and what the primary strategic objectives of Irish Water are to be. The Plan will set strategic objectives taking into account capacity deficits and demographic and economic trends.

### 5.6.3 Urban Waste Water Treatment Directive 2001

The treatment of waste water 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 No. 254 of 2001). The Directive aims to protect the environment from the adverse effects of the waste water discharges by

ensuring that waste water 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 5.5.1).

#### 5.6.4 Drinking Water Regulations 2007

The European Communities (Drinking Water) Regulations (No. 2) 2007 require the compliance of water intended for human consumption with 48 parameters.

Measures have been integrated into the Development Plan in order to help ensure a clean and wholesome water supply.

#### 5.6.5 Waste Management

The Council's Waste Management Strategy is firmly grounded in EU and National policy and can be summarised by the waste hierarchy of prevention, recycling, energy recovery and disposal. In relation to the treatment of waste, Dún Laoghaire-Rathdown County Council is committed to developing a waste management model which conforms to the European Union and National Waste Management Hierarchy. A new Regional Waste Management Plan for the Eastern and Midlands Region was adopted in 2015.

#### 5.6.6 SEOs, Indicators and Target

<b>SEO M1:</b>	To serve new development with adequate and appropriate waste water treatment
<b>Indicator M1:</b>	Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the Plan
<b>Target M1:</b>	All new developments granted permission to be connected to and adequately and appropriately served by waste

water treatment over the lifetime of the Plan
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<b>SEO M2:</b>	To serve new development with adequate drinking water that is both wholesome and clean
<b>Indicator M2:</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 as a result of implementing the Plan
<b>Target M2:</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 as a result of implementing the Plan

<b>SEO M3:</b>	To reduce waste volumes, minimise waste to landfill and increase recycling and reuse
<b>Indicator M3i:</b>	Total collected and brought household waste
<b>Target M3i:</b>	Minimise increases in and, where possible, reduce household waste generation
<b>Indicator M3ii:</b>	Packaging recovered (t) by self-complying packagers
<b>Target M3ii:</b>	Maximise increases in packaging recovered (t) by self-complying packagers

## 5.7 Air and Climatic Factors

### 5.7.1 Introduction

The impact of implementing the Plan on air quality and climatic factors will be determined by the impacts which the Plan has upon the greenhouse gas emissions arising from transport which relate to SEO C1.

Travel is a source of:

1. Noise;
2. Air emissions; and
3. Energy use (38.8% of Total Final Consumption in Ireland in 2010 was taken up by transport, the largest take up of any sector)<sup>31</sup>.

Land-use planning contributes to the number and extent of journeys occurring. By addressing journey time through land use planning, noise and other emissions to air and energy use can be minimised. Furthermore, by concentrating populations, greenfield development - and its associated impacts - can be minimised and the cost of service provision can be reduced.

### 5.7.2 Air Quality

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 inhabitants. The EU Directives 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 while four daughter Directives lay down limits or thresholds for specific pollutants.

### 5.7.3 Climatic Factors

The 2020 EU Effort Sharing target commits Ireland to reducing emissions from those sectors that are not covered by the Emissions Trading Scheme (e.g. transport, agriculture and residential) to 20% below 2005 levels.

### 5.7.4 Noise

Noise is unwanted sound. Traffic noise alone is harming today the health of almost one third of Europeans<sup>32</sup>.

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>33</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.

### 5.7.5 SEOs, Indicators and Targets

<b>SEO C1:</b>	To reduce travel related emissions to air and to encourage modal change from car to more sustainable forms of transport
Indicator C1:	Percentage of population working within the Planning Scheme area travelling to work by public transport or non-mechanical means
Target C1:	An increase in the percentage of the population travelling to work by public transport or non-mechanical means

<sup>31</sup> Sustainable Energy Ireland (2011) *Energy in Ireland 1990 – 2010*

<sup>32</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>33</sup> [ $L_{den}$  (day-evening-night equivalent level) and  $L_{night}$  (night equivalent level)]

## 5.8 Cultural Heritage

### 5.8.1 Archaeological Heritage

#### 5.8.1.1 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.

#### 5.8.1.2 National Heritage Plan for Ireland 2002

The core objective of the National Heritage Plan for Ireland 2002<sup>34</sup> is to protect Ireland's heritage. In this regard the polluter pays and the precautionary principle are operable.

#### 5.8.1.3 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 (RMP) 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.

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.

<sup>34</sup> Department of Arts, Heritage, Gaeltacht and the Islands (2002) *National Heritage Plan for Ireland* Dublin: Government of Ireland

### 5.8.2 Architectural Heritage

Records of Protected Structures (RPSs) are legislated for under Section 51 of the Planning and Development Act 2000 as amended and include structures which form part of the architectural heritage and which are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest.

Architectural Conservation Areas (ACAs) are places, areas or groups of structures or townscapes which are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or value, or contribute 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.

### 5.8.3 SEO, Indicators and Targets

<b>SEO CH1:</b>	To protect archaeological heritage including entries to the Record of Monuments and Places and/or their context
Indicator CH1:	Percentage of entries to the Record of Monuments and Places - including Zones of Archaeological Potential (and the context of the above within the surrounding landscape where relevant) - protected from significant adverse effects arising from new development granted permission under the Plan
Target CH1:	Protect entries to the Record of Monuments and Places - including Zones of Archaeological Potential (and their context of the above within the surrounding landscape where relevant) from significant adverse effects arising from new development granted permission under the Plan

**SEO CH2:** To protect architectural heritage including entries to the Record of Protected Structures and Architectural Conservation Areas and their context

Indicator CH2: Percentage of entries to the Record of Protected Structures and Architectural Conservation Areas and their context protected from significant adverse effects arising from new development granted permission under the Plan

Target CH2: Protect entries to the Record of Protected Structures and Architectural Conservation Areas and their context from significant adverse effects arising from new development granted permission under the Plan

## 5.9 Landscape

### 5.9.1 Planning and Development Acts

The Planning and Development Acts, 2000 - 2010 requires that a Development Plan shall include objectives relating to ‘... *landscape, in accordance with relevant policies or objectives for the time being of the Government relating to providing a framework for identification, assessment, protection, management and planning of landscapes and developed having regard to the European Landscape Convention.*’

### 5.9.2 European Landscape Convention

The European Landscape Convention - also known as the Florence Convention, - promotes the protection, management and planning of European landscapes and organises European co-operation on landscape issues. The Convention defines landscape as ‘*an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors.*’ As a signatory of the

Convention there is an obligation on Ireland to prepare a National Landscape Strategy.

### 5.9.3 National Landscape Strategy

The National Landscape Strategy for Ireland 2015-2025 sets out Ireland’s aims and objectives with regard to landscape. The Strategy contains a commitment to preparing an overarching National Landscape Character Assessment for Ireland.

### 5.9.4 County Designations

There are a variety of County level designations which are afforded degrees of protection under the County Development Plan including High Amenity Zones and Views and Prospects (see Section 4.10).

### 5.9.5 SEO, Indicator and Target

**SEO L1:** To minimise significant adverse visual impacts within and adjacent to the Plan area - especially having regard to the Plan Policies LHB2 to 6 which provide for the protection and management of Landscape Character Areas, the Seascape, High Amenity Zones, Historic Landscape Character Areas and Views and Prospects

Indicator L1: Implementation of Plan Policies LHB2 to LHB6 which provide for the protection and management of Landscape Character Areas, the Seascape, High Amenity Zones, Historic Landscape Character Areas and Views and Prospects

Target L1: To implement Plan Policies LHB2 to LHB6 which provide for the protection and management of Landscape Character Areas, the Seascape, High Amenity Zones, Historic Landscape Character Areas and Views and Prospects