# **NATURA IMPACT STATEMENT**

#### **IN SUPPORT OF THE**

# **APPROPRIATE ASSESSMENT**

FOR THE

# DRAFT TRANSPORT STRATEGY FOR THE GREATER DUBLIN AREA 2022-2042

for: National Transport Authority

Dún Scéine Iveagh Court Harcourt Lane

Dublin 2



by: CAAS Ltd.

1st Floor

24-26 Ormond Quay Upper

Dublin 7



# **Table of Contents**

Section 1 Introduction	
1.1 Background	1
1.2 Legislative Context	1
1.3 Approach	1
Section 2 Description of Strategy	3
2.1 Introduction	3
2.2 Strategy Aim	3
2.3 Strategy Objectives	3
2.4 Relationship with other relevant Plans and Programmes	4
Section 3 Screening for Appropriate Assessment	5
3.1 Introduction to Screening	5
3.2 Identification of Relevant European Sites	5
3.3 Assessment Criteria and Screening	9
3.3.1 Is the Strategy Necessary to the Management of European Sites?	9
3.3.2 Elements of the Strategy with Potential to Give Rise to Effects	9
3.3.3 Screening of Sites	9
3.4 Other Plans and Programmes	24
3.5 AA Screening Conclusion	24
Section 4 Stage 2 Appropriate Assessment	26
4.1 Introduction	26
4.2 Characterisation of European sites Potentially Affected	26
4.3 Identifying and Characterising Potential Significant Effects	26
4.3.1 Types of Potential Effects	27
Section 5 Mitigation Measures	37
Section 6 Conclusion	44
Appendix I Background information on European Sites	_
Appendix II Qualifying Interests of SACs that have undergone assessment	
Appendix III Special Conservation Interests of SPAs that have undergone a	assessment
Appendix IV Relationship with Other Plans, Programmes, Projects	

# **List of Tables**

Table 3.1 Screening of European Sites	.10
Table 4.1 Characterisation of Potential Effects arising from the Strategy	. 30
Table 5.1 SEA/AA recommendations included within the Strategy that will contribute towards	the
protection of European sites	. 38
Table 5.2 Provisions referred to in the Strategy under "Other SEA/AA Recommendations" that	will
contribute towards the protection of European sites	. 40

## **Section 1** Introduction

## 1.1 Background

This Natura Impact Statement (NIS) has been prepared in support of the Appropriate Assessment (AA) of the Draft Transport Strategy for the Greater Dublin Area [the Strategy] in accordance with the requirements of Article 6(3) of Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (as amended) (hereafter referred to as the "Habitats Directive"). This report is part of the ongoing AA process that is being undertaken alongside the preparation of the Strategy. It will be considered, alongside other documentation prepared as part of this process, when The National Transport Authority finalises the AA at adoption of the Strategy.

## 1.2 Legislative Context

The Habitats Directive provides legal protection for habitats and species of European importance. The overall aim of the Habitats Directive is to maintain or restore the "favourable conservation status" of habitats and species of European Community Interest. These habitats and species are listed in the Habitats and Birds Directives (Council Directive 2009/147/EC on the conservation of wild birds) with Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) designated to afford protection to the most vulnerable of them. These two designations are collectively known as European sites which form the Natura 2000 Network. AA is required by the Habitats Directive, as transposed into Irish legislation by the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended) and the Planning and Development Act (as amended). AA is an assessment of the potential for adverse or negative effects of a plan or project, in combination with other plans or projects, on the conservation objectives of a European site. These sites consist of SACs and SPAs and provide for the protection and long-term survival of Europe's most valuable and threatened species and habitats.

## 1.3 Approach

The AA is based on best scientific knowledge and has utilised ecological and hydrological expertise. In addition, a detailed online review of published scientific literature and grey literature<sup>1</sup> was conducted. This included a detailed review of the National Parks and Wildlife (NPWS) website including mapping and available reports for relevant sites and in particular sensitive qualifying interests/special conservation interests described and their conservation objectives (including spatial data collected for the most recent Article 12 and Article 17 conservation status reporting cycle). All of these data sources are likely to be useful for AAs that must be undertaken for lower-tier plans/projects under the Strategy.

The ecological desktop study completed for the AA of the Strategy comprised the following elements:

- Identification of European sites within 15km of the Strategy boundary with identification of potential pathways links for specific sites (if relevant) greater than 15km from the Strategy boundary;
- Review of the NPWS site synopsis and conservation objectives for European sites with identification of potential pathways from the Strategy area; and
- Examination of available information on protected species.

There are four main stages in the AA process as follow:

#### Stage One: Screening

The process that identifies the likely impacts upon a European site of a project or plan, either alone or in combination with other projects or plans and considers whether these impacts are likely to be significant.

#### **Stage Two: Appropriate Assessment**

The consideration of the impact on the integrity of the European site of the project or plan, either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts. If adequate mitigation is proposed to ensure no significant adverse impacts on European sites, then the process may end at this stage. However, if the likelihood of significant impacts remains, then the process must proceed to Stage Three.

<sup>&</sup>lt;sup>1</sup> Various documents where publishing, in journals for example, is not the primary activity of the producing body. Examples include: conference presentations; regulatory data; unpublished trial data; government publications; and dissertations/theses.

#### Stage Three: Assessment of Alternative Solutions

The process that examines alternative ways of achieving the objectives of the project or plan that avoids adverse impacts on the integrity of the European site.

Stage Four: Assessment where no alternative solutions exist and where adverse impacts remain

An assessment of compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project or plan should proceed.

The Habitats Directive promotes a hierarchy of avoidance, mitigation and compensatory measures. This approach aims to avoid any effects on European sites by identifying possible effects early in the planmaking process and avoiding such effects. Second, the approach involves the application of mitigation measures, if necessary, during the AA process to the point where no adverse effects on the site(s) remain. If potential effects on European sites remain, the approach requires the consideration of alternative solutions. If no alternative solutions are identified and the plan/project is required for imperative reasons of overriding public interest, then compensation measures are required for any remaining adverse effect(s).

The assessment of potential effects on European sites is conducted following a standard source-pathway-receptor model<sup>2</sup>, where, in order for an effect to be established all three elements of this mechanism must be in place. The absence or removal of one of the elements of the model is sufficient to conclude that a potential effect is not of any relevance or significance.

In the interest of this report, receptors are the ecological features that are known to be utilised by the qualifying interests or special conservation interests of a European site. A source is any identifiable element of the Strategy provision that is known to interact with ecological processes. The pathways are any connections or links between the source and the receptor. This report provides information on whether direct, indirect and cumulative adverse effects could arise from the Strategy.

The NIS exercise has been prepared taking into account legislation including the aforementioned legislation and guidance including the following:

- Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities, Department of the Environment, Heritage and Local Government, 2009;
- "Commission Notice: Managing Natura 2000 sites The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC", European Commission 2018;
- "Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC", European Commission Environment DG, 2002; and
- "Managing Natura 2000 sites: The Provisions of Article 6 of the Habitats Directive 92/43/EEC", European Commission, 2000: and
- Appropriate Assessment Screening for Development Management; OPR Practice Note PN01; Office of the Public Regulator, 2021.

-

<sup>&</sup>lt;sup>2</sup> Source(s) – e.g., pollutant run-off from proposed works; Pathway(s) – e.g., groundwater connecting to nearby qualifying wetland habitats; and Receptor(s) – qualifying aquatic habitats and species of European Sites

# **Section 2** Description of Strategy

#### 2.1 Introduction

Under the Dublin Transport Authority Act, the National Transport Authority (NTA) must review its transport strategy every 6 years. Arising from the review of the 2016 plan, an updated strategy has been developed which sets out the framework for investment in transport infrastructure and services over the next two decades to 2042.

The Transport Strategy for the Greater Dublin Area 2022-2042 will replace the previous strategy, titled the Transport Strategy for the Greater Dublin Area 2016-2035, which was approved by the then Minister for Transport, Tourism and Sport in 2016.

That 2016-2035 Transport Strategy set out to contribute to the economic, social and cultural progress of the Greater Dublin Area (GDA) by providing for the efficient, effective and sustainable movement of people and goods. In other words, it was about making the Dublin region a better place for people who live and work there, and for those who visit.

It did so by providing a framework for the planning and delivery of transport infrastructure and services in the GDA. It has also provided a transport planning policy around which other agencies involved in land use planning, environmental protection, and delivery of other infrastructure such as housing, water and power, could align their own investment priorities.

It has been an essential component, along with investment programmes in other sectors, for the development of the GDA which covers the counties of Dublin, Meath, Kildare and Wicklow. Major projects provided for in that strategy included:

- · Luas Cross City;
- The reopening of the Phoenix Park Tunnel Rail Line;
- · The on-going roll out of cycle tracks and greenways;
- Metrolink:
- DART+ Programme;
- Investment in bus priority and bus service improvements BusConnects Dublin; and
- M7 Naas to Newbridge widening, Osberstown Interchange and Sallins Bypass.

## 2.2 Strategy Aim

To provide a sustainable, accessible and effective transport system for the Greater Dublin Area which meets the region's climate change requirements, serves the needs of urban and rural communities, and supports economic growth.

## 2.3 Strategy Objectives

#### **An Enhanced Natural and Built Environment**

To create a better environment and meet our environmental obligations by transitioning to a clean, low emission transport system, reducing car dependency, and increasing walking, cycling and public transport use.

#### **Connected Communities and Better Quality of Life**

To enhance the health and quality of life of our society by improving connectivity between people and places, delivering safe and integrated transport options, and increasing opportunities for walking and cycling.

#### A Strong Sustainable Economy

To support economic activity and growth by improving the opportunity for people to travel for work or business where and when they need to, and facilitating the efficient movement of goods.

#### **An Inclusive Transport System**

To deliver a high quality, equitable and accessible transport system, which caters for the needs of all members of society.

## 2.4 Relationship with other relevant Plans and Programmes

Of course no transport strategy can ever be a standalone document. A transport strategy will always be part of a larger picture of overall national policies that must work towards a single set of overall objectives. To a large extent, policies and objectives around issues such as land use, development, population distribution, investment, sustainability and climate action, for example, are determined by other state agencies and authorities, but must be fully reflected in any transport strategy.

As such, the Transport Strategy has been developed to be consistent with the spatial planning policies and objectives set out in the Regional Spatial and Economic Strategy (RSES). These objectives in turn are consistent with the National Planning Framework 2018 and the National Development Plan 2021-2030.

The hierarchy of strategic actions, such as plans and programmes, within which the Strategy sites include those detailed in Appendix IV<sup>3</sup>.

The Strategy aligns with legislation and documents setting out public policy for land use, transport and climate action and will be incorporated into the review and preparation of these documents. These include the National Planning Framework (and associated National Development Plan), the Strategic Investment Framework for Land Transport, the National Investment Framework for Transport in Ireland, the Regional Economic and Spatial Strategy for the Eastern and Midland Region (as adopted by the Eastern and Midland Regional Assembly, and finalised in January 2020) and associated Dublin Metropolitan Area Strategic Plan, the City and County Development Plans, Local Area Plans and Planning Schemes. Certain transport related proposals already provided for by these documents (and considered by their environmental assessments) are amongst those included within the Strategy. The Transport Strategy is based on national policies on sustainability as set out in the Climate Action Plan and recent climate action legislation.

-

<sup>&</sup>lt;sup>3</sup> Appendix IV is not intended to be a full and comprehensive review of EU Directives, the transposing regulations or the regulatory framework for environmental protection and management. The information is not exhaustive and it is recommended to consult the Directive, Regulation, Plan or Programme to become familiar with the full details of each.

# **Section 3** Screening for Appropriate Assessment

## 3.1 Introduction to Screening

This stage of the process identifies any potential significant affects to European sites from a project or plan, either alone or in combination with other projects or plans.

An important element of the AA process is the identification of the "conservation objectives", "Qualifying Interests" (QIs) and/or "Special Conservation Interests" (SCIs) of European sites requiring assessment. QIs are the habitat features and species listed in Annexes I and II of the Habitats Directive for which each European Site has been designated and afforded protection. SCIs are wetland habitats and bird species listed within Annexes I and II of the Birds Directive. It is also vital that the threats to the ecological / environmental conditions that are required to support QIs and SCIs are considered as part of the assessment.

The following NPWS Generic Conservation Objectives have been considered in the screening:

- For SACs, to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected; and
- For SPAs, to maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.

Where available, Site-Specific Conservation Objectives (SSCOs) designed to define favourable conservation status for a particular habitat<sup>4</sup> or species<sup>5</sup> at that site have been considered.

## 3.2 Identification of Relevant European Sites

The Department of the Environment (2009) Guidance on AA recommends a 15 km buffer zone to be considered. Although sites beyond this buffer zone would be considered if relevant, a review of all sites within this zone has allowed the conclusion to be made that in the absence of significant hydrological links the characteristics of the Strategy will not impose effects beyond the 15 km buffer. The assessment process also considers hydrogeological processes and possible effects to ground water with respect to ground water sensitive habitats and species.

Details of European sites that occur within 15 km of the Strategy boundary are provided in Table 3.1. European sites and EPA Rivers Catchments are also mapped in Figure 3.1 below. Information on QIs, SCIs and site-specific vulnerabilities and sensitivities (see Appendix I) and background information (such as that within Ireland's Article 17 Report to the European Commission, site synopses and Natura 2000 standard data forms) have been considered by both the AA screening assessment (provided under this section) and Stage 2 AA (provided under Section 4). Conservation objectives that have been considered by the assessment are included in the following National Parks and Wildlife Service documents:

```
NPWS (2015) Conservation Objectives for Killyconny Bog (Cloghbally) SAC [IE0000006] Version 1.

NPWS (2012) Conservation Objectives for Baldoyle Bay SAC [IE0000199] Version 1.

NPWS (2016) Conservation Objectives for Howth Head SAC [IE0000202] Version 1.

NPWS (2013) Conservation Objectives for Lambay Island SAC [IE0000204] Version 1.

NPWS (2013) Conservation Objectives for Malahide Estuary SAC [IE0000205] Version 1.

NPWS (2013) Conservation Objectives for North Dublin Bay SAC [IE0000206] Version 1.

NPWS (2013) Conservation Objectives for Rogerstown Estuary SAC [IE0000206] Version 1.

NPWS (2013) Conservation Objectives for South Dublin Bay SAC [IE0000210] Version 1.

NPWS (2013) Conservation Objectives for Ballynafagh Bog SAC [IE0000391] Version 1.

NPWS (2015) Conservation Objectives for Ballynafagh Bog SAC [IE0000391] Version 1.

NPWS (2019) Conservation Objectives for Red Bog, Kildare SAC [IE0000397] Version 1.

NPWS (2019) Conservation Objectives for Ballyman Glen SAC [IE0000397] Version 1.

NPWS (2017) Conservation Objectives for Ballyman Glen SAC [IE0000397] Version 1.

NPWS (2017) Conservation Objectives for Carriggower Bog SAC [IE0000713] Version 1.

NPWS (2017) Conservation Objectives for Carriggower Bog SAC [IE0000716] Version 1.

NPWS (2021) Conservation Objectives for Deputy's Pass Nature Reserve SAC [IE0000717] Version 8.

NPWS (2021) Conservation Objectives for Glen of the Downs SAC [IE0000719] Version 8.

NPWS (2021) Conservation Objectives for Knocksink Wood SAC [IE0000719] Version 8.

NPWS (2021) Conservation Objectives for Bulkynoney-Brittas Dunes and Fen SAC [IE0000729] Version 1.

NPWS (2021) Conservation Objectives for Bulkynoney-Brittas Dunes and Fen SAC [IE0000733] Version 8.
```

<sup>&</sup>lt;sup>4</sup> Favourable conservation status of a habitat is achieved when: its natural range, and area it covers within that range, are stable or increasing; the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future; and the conservation status of its typical species is favourable.

<sup>&</sup>lt;sup>5</sup>The favourable conservation status of a species is achieved when: population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

```
NPWS (2011) Conservation Objectives for Slaney River Valley SAC [IE0000781] Version 1. NPWS (2021) Conservation Objectives for Glenasmole Valley SAC [IE0001209] Version 8.
 NPWS (2021) Conservation Objectives for Ballynafagh Lake SAC [IE0001387] Version 8. NPWS (2021) Conservation Objectives for Rye Water Valley/Carton SAC [IE0001398] Version 8.
 NPWS (2017) Conservation Objectives for Kilpatrick Sandhills SAC [IE0001742] Version 1
 NPWS (2019) Conservation Objectives for Holdenstown Bog SAC [IE0001757] Version 1. NPWS (2017) Conservation Objectives for Magherabeg Dunes SAC [IE0001766] Version
 NPWS (2021) Conservation Objectives for White Lough, Ben Loughs and Lough Doo SAC [IE0001810] Version 8. NPWS (2012) Conservation Objectives for Boyne Coast and Estuary SAC [IE0001957] Version 1.
 NPWS (2021) Conservation Objectives for Lough Bane and Lough Glass SAC [IE0002120] Version 8 NPWS (2017) Conservation Objectives for Wicklow Mountains SAC [IE0002122] Version 1.
 NPWS (2011) Conservation Objectives for River Barrow and River Nore SAC [IE0002162] Ve
 NPWS (2017) Conservation Objectives for Ireland's Eye SAC [IE0002193] Version 1. NPWS (2021) Conservation Objectives for Girley (Drewstown) Bog SAC [IE0002203] Version 8
 NPWS (2021) Conservation Objectives for The Murrough Wetlands SAC [IE0002249] Version 8. NPWS (2021) Conservation Objectives for River Boyne and River Blackwater SAC [IE0002299] Version 8.
 NPWS (2015) Conservation Objectives for Mouds Bog SAC [IE0002331] Version
NPWS (2016) Conservation Objectives for Moneybeg and Clareisland Bogs SAC [IE0002340] Version 1. NPWS (2016) Conservation Objectives for Mount Hevey Bog SAC [IE0002342] Version 1.
 NPWS (2013) Conservation Objectives for Rockabill to Dalkey Island SAC [IE0003000] Version 1. NPWS (2015) Conservation Objectives for North Bull Island SPA [IE0004006] Version 1.
 NPWS (2013) Conservation Objectives for Rogerstown Estuary SPA [IE0004015] Version 1 NPWS (2013) Conservation Objectives for Baldoyle Bay SPA [IE0004016] Version 1.
 NPWS (2015) Conservation Objectives for South Dublin Bay and River Tolka Estuary SPA [IE0004024] Version 1
 NPWS (2013) Conservation Objectives for Malahide Estuary SPA [IE0004025] Version 1.

NPWS (2021) Conservation Objectives for Wicklow Mountains SPA [IE0004040] Version 8
 NPWS (2021) Conservation Objectives for Poulaphouca Reservoir SPA [IE0004063] Version 8. NPWS (2021) Conservation Objectives for Lough Sheelin SPA [IE0004065] Version 8.
 NPWS (2021) Conservation Objectives for Lambay Island SPA [IE0004069] Version 8. NPWS (2013) Conservation Objectives for Boyne Estuary SPA [IE0004080] Version 1. NPWS (2021) Conservation Objectives for Howth Head Coast SPA [IE0004113] Version 8
 NPWS (2021) Conservation Objectives for Ireland's Eye SPA [IE0004117] Version 8. NPWS (2021) Conservation Objectives for Wicklow Head SPA [IE0004127] Version 8
 NPWS (2012) Conservation Objectives for River Nanny Estuary and Shore SPA [IE0004158] Version 1. NPWS (2021) Conservation Objectives for Dalkey Islands SPA [IE0004172] Version 8.
 NPWS (2021) Conservation Objectives for The Murrough SPA [IE0004186] Version 8
 NPWS (2021) Conservation Objectives for River Boyne and River Blackwater SPA [IE0004232] Version 8. NPWS (2021) Conservation Objectives for Skerries Islands SPA [IE0004122] Version 8.
NPWS (2021) Conservation Objectives for Wicklow Reef SAC [IE0002274] Version 1.

NPWS (2021) Conservation Objectives for The Long Derries, Edenderry SAC [IE0000925] Version 8.

NPWS (2013) Conservation Objectives for Rockabill SPA [IE0004014] Version 1.

NPWS (2021) Conservation Objectives for Ballyprior Grassland SAC [IE0002256] Version 8.
 NPWS (2021) Conservation Objectives for Lough Lene SAC [IE0002121] Version 8
 NPWS (2021) Conservation Objectives for Lough Kinale and Derragh Lough SPA [IE0004061] Version 8. NPWS (2021) Conservation Objectives for Derragh Bog SAC [IE0002201] Version 8.
 NPWS (2017) Conservation Objectives for Clogher Head SAC [IE0001459] Version 1.

NPWS (2021) Conservation Objectives for Stabannan-Braganstown SPA [IE0004091] Version 8.
 NPWS (2021) Conservation Objectives for Mountmellick SAC [IE0002141] Version 8. NPWS (2021) Conservation Objectives for Lough Derravaragh SPA [IE0004043] Version 8. NPWS (2019) Conservation Objectives for Blackstairs Mountains SAC [IE0000770] Version 1.
NPWS (2019) Conservation Objectives for Blackstairs Mountains SAC [1E00007/0] Version RNPWS (2021) Conservation Objectives for Wooddown Bog SAC [1E0002205] Version 8. NPWS (2018) Conservation Objectives for Lough Ennell SAC [1E0000685] Version 1. NPWS (2015) Conservation Objectives for Garriskil Bog SAC [1E0000679] Version 1. NPWS (2021) Conservation Objectives for Lough Ennell SPA [1E0004044] Version 8. NPWS (2015) Conservation Objectives for Raheenmore Bog SAC [1E0000582] Version 1. NPWS (2015) Conservation Objectives for Ardagullion Bog SAC [1E0002341] Version 1. NPWS (2011) Conservation Objectives for Dundalk Bay SPA [1E0004026] Version 1.
 NPWS (2011) Conservation Objectives for Dundalk Bay SAC [IE0000455] Version 1. NPWS (2021) Conservation Objectives for Garriskil Bog SPA [IE0004102] Version 8.
 NPWS (2021) Conservation Objectives for Lough Iron SPA [IE0004046] Version 8 NPWS (2012) Conservation Objectives for The Raven SPA [IE0004019] Version 1.
 NPWS (2012) Conservation Objectives for Wexford Harbour and Slobs SPA [IE0004076] Version 1.
 NPWS (2016) Conservation Objectives for Lough Ree SAC [IE0000440] Version 1. NPWS (2018) Conservation Objectives for Lough Ree SPA [IE0004064] Version 6.
 NPWS (2018) Conservation Objectives for Middle Shannon Callows SPA [IE0004096] Version 6. NPWS (2018) Conservation Objectives for River Shannon Callows SAC [IE0000216] Version 6.
 NPWS (2017) Conservation Objectives for Lower River Suir SAC [002137] Version1.

NPWS (2018) Conservation Objectives for River Suck Callows SPA [IE0004097] Version 6.

NPWS (2019) Conservation Objectives for Lough Derg, North-East Shore SAC [IE0002241] Version 1.
 NPWS (2020) Conservation Objectives for Lough Derg (Shannon) SPA [IE0004058] Version 7 NPWS (2012) Conservation Objectives for Lower River Shannon SAC [IE0002165] Version 1.
 NPWS (2012) Conservation Objectives for River Shannon and River Fergus Estuaries SPA [IE0004077] Version 1.
```

The assessment considers available conservation objectives. Since conservation objectives focus on maintaining the favourable conservation condition of the QIs/SCIs of each site, the screening process concentrated on assessing the potential effects of the Strategy against the QIs/SCIs of each site. The conservation objectives for each site were consulted throughout the assessment process.

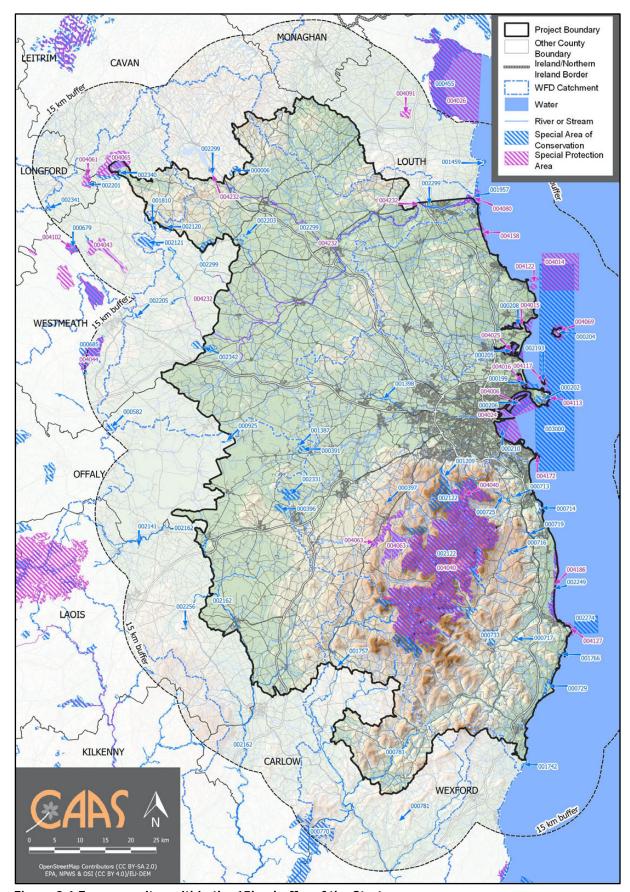


Figure 3.1 European sites within the 15km buffer of the Strategy area

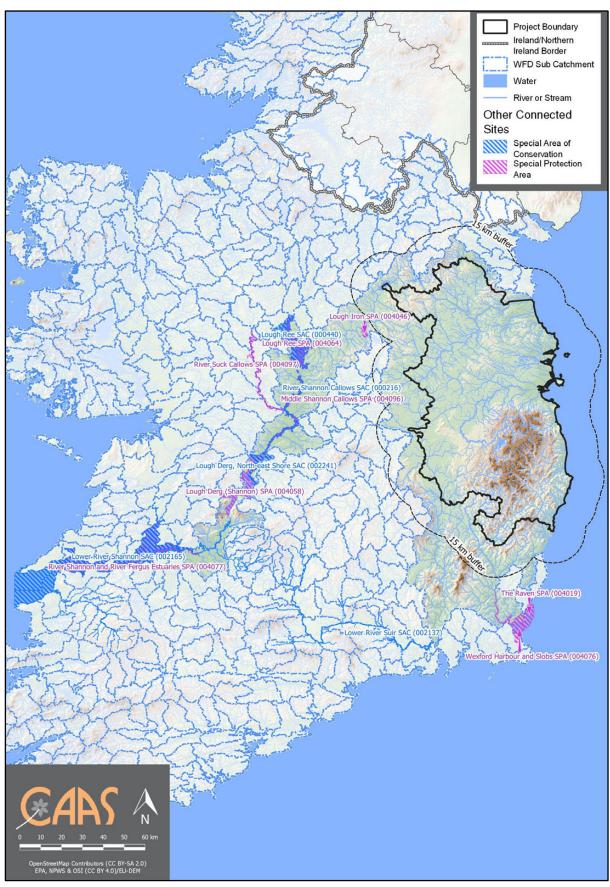


Figure 3.2 European sites hydrologically linked to the Strategy area

## 3.3 Assessment Criteria and Screening

#### 3.3.1 Is the Strategy Necessary to the Management of European Sites?

The overarching objective of the Strategy is not the nature conservation management of the sites, but to provide a sustainable, accessible and effective transport system for the Greater Dublin Area. Therefore, the Strategy is not considered to be directly connected with or necessary to the management of European sites.

#### 3.3.2 Elements of the Strategy with Potential to Give Rise to Effects

The Strategy provides a framework for a sustainable, accessible and effective transport system for the Greater Dublin Area. There are a number of environmental sensitivities within the area and an assessment of effects indicates the potential effects relate to the following:

- Arising from both construction and operation of development and associated infrastructure:
  - Loss of/damage to biodiversity in designated sites (including European sites and Wildlife Sites) and Annexed habitats and species, listed species, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna;
  - Habitat loss, fragmentation and deterioration, including patch size and edge effects; and
  - Disturbance (e.g., due to noise and lighting along transport corridors) and displacement of protected species.
- · Potential interactions if effects upon environmental vectors such as water and air.
- · Adverse effects from tourism, amenity and recreation.
- Damage to the hydrogeological and ecological function of the soil resource.
- Adverse effects upon the status of water bodies arising from changes in quality, flow and/or morphology.
- · Increase in the risk of flooding.
- Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts).
- · Emissions to air including greenhouse gas emissions and other emissions.

The elements of the Strategy with the highest potential to give rise to the effects indicated above are associated with construction phase elements of the implementation of the Strategy. The operational phase elements of the Strategy are consistent with the existing condition of the area. All measures are considered in this assessment with respect to the ecological integrity of each of the European sites identified. Considering the sensitivities/vulnerabilities of the QIs and SCIs in relation to all potential sources for effects and potential pathways for such effects. Where sources and pathways for effects are identified potential effects will be assessed in relation to the SSCOs.

#### 3.3.3 Screening of Sites

Table 3.1 examines whether there is potential for effects on European sites considering information provided above, including Appendix I. Sites are screened out based on one or a combination of the following criteria:

- The existence of potential for pathways for significant effects, such as hydrological links, Strategy proposals and the site to be screened;
- The distance of the relevant site from the Strategy boundary; and
- The existence of a link between identified threats or vulnerabilities at a site to potential impacts that may arise from the Strategy.

## **Table 3.1 Screening of European Sites**

Site Code	European site	Distance (km)	Qualifying Features (Qualifying Interest and Special Conservation Interests)	Potential effects (refer also to Sections 3.3.2 and 3.3.3 above)	Pathway for Significant Effects	Potential for In-Combination Effects
000006	Killyconny Bog (Cloghbally) SAC	Within	Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
000199	Baldoyle Bay SAC	Within	Mediterranean salt meadows (Juncetalia maritimi) [1410], Salicornia and other annuals colonising mud and sand [1310], Mudflats and sandflats not covered by seawater at low tide [1140], Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
000202	Howth Head SAC	Within	Vegetated sea cliffs of the Atlantic and Baltic Coasts [1230], European dry heaths [4030]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
000204	Lambay Island SAC	Within	Vegetated sea cliffs of the Atlantic and Baltic coasts [1230], Harbour seal (Phoca vitulina) [1365], Grey seal (Halichoerus grypus) [1364], Reefs [1170]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
000205	Malahide Estuary SAC	Within	Salicornia and other annuals colonising mud and sand [1310], Mudflats and sandflats not covered by seawater at low tide [1140], Mediterranean salt meadows ( <i>Juncetalia maritimi</i> ) [1410], Shifting dunes along the shoreline with Ammophila arenaria - white dunes [2120], Atlantic salt meadows ( <i>Glauco-Puccinellietalia maritimae</i> ) [1330], Fixed coastal dunes with herbaceous vegetation - grey dunes [2130]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
000206	North Dublin Bay SAC	Within	Embryonic shifting dunes [2110], Fixed coastal dunes with herbaceous vegetation-grey dunes [2130], Petalwort ( <i>Petalophyllum ralfsii</i> ) [1395], Mudflats and sandflats not covered by seawater at low tide [1140], Mediterranean salt meadows ( <i>Uncetalia maritimi</i> ) [1410], Annual vegetation of drift lines [1210], Salicornia and other annuals colonising mud and sand [1310], Humid dune slacks [2190], Shifting dunes along the shoreline with Ammophila arenaria - white dunes [2120], Atlantic salt meadows ( <i>Glauco-Puccinellietalia maritimae</i> ) [1330]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site shydrologically sensitive. It exists within the Strategy boundary and within a recycling catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
000208	Rogerstown Estuary SAC	Within	Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Shifting dunes along the shoreline with Ammophila arenaria - white dunes [2120], Salicornia and other annuals colonising mud and sand [1310], Estuaries [1130], Mudflats and sandflats not covered by seawater at low tide [1140], Mediterranean salt meadows (Juncetalia maritimi) [1410]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
000210	South Dublin Bay SAC	Within	Embryonic shifting dunes [2110], Salicornia and other annuals colonising mud and sand [1310], Mudflats and sandflats not covered by seawater at low tide [1140], Annual vegetation of drift lines [1210]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
000391	Ballynafagh Bog SAC	Within	Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
000396	Pollardstown Fen SAC	Within	Desmoulin's whorl snail (Vertigo moulinsiana) [1016], Petrifying springs with tufa formation (Cratoneurion) [7220], Narrow-mouthed whorl snail (Vertigo angustior) [1014], Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210], Geyer's whorl snail (Vertigo geyeri) [1013], Alkaline fens [7230]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
000397	Red Bog, Kildare SAC	Within	Transition mires and quaking bogs [7140]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
000713	Ballyman Glen SAC	Within	Alkaline fens [7230], Petrifying springs with tufa formation (Cratoneurion) [7220]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the	Yes	Yes

Site Code	European site	Distance (km)	Qualifying Features (Qualifying Interest and Special Conservation Interests)	Potential effects (refer also to Sections 3.3.2 and 3.3.3 above)	Pathway for Significant Effects	Potential for In-Combination Effects
000714	Bray Head SAC	Within	European dry heaths [4030], Vegetated sea cliffs of the Atlantic and Baltic Coasts [1230]	sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.  The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
000716	Carriggower Bog SAC	Within	Transition mires and quaking bogs [7140]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
000717	Deputy's Pass Nature Reserve SAC	Within	Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
000719	Glen of the Downs SAC	Within	Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
000725	Knocksink Wood SAC	Within	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion Incanae, Salicion albae) [91E0], Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0], Petrifying springs with tufa formation (Cratoneurion) [7220]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
000729	Buckroney- Brittas Dunes and Fen SAC	Within	Dunes with Salix repens ssp. argentea (Salicion arenariae) [2170], Alkaline fens [7230], Humid dune slacks [2190], Shifting dunes along the shoreline with Ammophila arenaria - white dunes [2120], Annual vegetation of drift lines [1210], Fixed coastal dunes with herbaceous vegetation - grey dunes [2130], Atlantic decalcified fixed dunes (Calluno-Ulicetea) [2150], Embryonic shifting dunes [2110], Mediterranean salt meadows (Juncetalia maritimi) [1410], Perennial vegetation of stony banks [1220]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving acthement of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
000733	Vale of Clara (Rathdrum Wood) SAC	Within	Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
000781	Slaney River Valley SAC	Within	Twaite shad (Alosa fallax) [1103], Mediterranean salt meadows (Juncetalia maritimi) [1410], Estuaries [1130], Harbour seal (Phoca vitulina) [1365], Mudflats and sandflats not covered by seawater at low tide [1140], Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260], River lamprey (Lampetra fluviatilis) [1099], Otter (Lutra lutra) [1355], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [9160], Sea lamprey (Petromyzon marinus) [1095], Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Brook lamprey (Lampetra planeri) [1096], Freshwater pearl mussel (Margaritifera margaritifera) [1029]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
001209	Glenasmole Valley SAC	Within	Petrifying springs with tufa formation (Cratoneurion) [7220], Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinian caeruleae) [6410], Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
001387	Ballynafagh Lake SAC	Within	Marsh Fritillary (Euphydryas aurinia) [1065], Alkaline fens [7230], Desmoulin`s whorl snail (Vertigo moulinsiana) [1016]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
001398	Rye Water Valley/Carton SAC	Within	Petrifying springs with tufa formation (Cratoneurion) [7220], Narrow-mouthed whorl snail (Vertigo angustior) [1014], Desmoulin's whorl snail (Vertigo moulinsiana) [1016]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes

Site Code	European site	Distance (km)	Qualifying Features (Qualifying Interest and Special Conservation Interests)	Potential effects (refer also to Sections 3.3.2 and 3.3.3 above)	Pathway for Significant Effects	Potential for In-Combination Effects
001742	Kilpatrick Sandhills SAC	Within	Shifting dunes along the shoreline with Ammophila arenaria - white dunes [2120], Annual vegetation of drift lines [1210], Fixed coastal dunes with herbaceous vegetation - grey dunes [2130], Embryonic shifting dunes [2110], Atlantic decalcified fixed dunes (Calluno-Ulicetea) [2150]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
001757	Holdenstown Bog SAC	Within	Transition mires and quaking bogs [7140]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
001766	Magherabeg Dunes SAC	Within	Annual vegetation of drift lines [1210], Shifting dunes along the shoreline with Ammophila arenaria - white dunes [2120], Petrifying springs with tufa formation ( <i>Cratoneurion</i> ) [7220], Embryonic shifting dunes [2110], Fixed coastal dunes with herbaceous vegetation - grey dunes [2130]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
001810	White Lough, Ben Loughs and Lough Doo SAC	Within	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140], White- clawed crayfish (Austropotamobius pallipes) [1092]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
001957	Boyne Coast and Estuary SAC	Within	Embryonic shifting dunes [2110], Estuaries [1130], Shifting dunes along the shoreline with Ammophila arenaria - white dunes [2120], Mudflats and sandflats not covered by seawater at low tide [1140], Annual vegetation of drift lines [1210], Salicornia and other annuals colonising mud and sand [1310], Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Fixed coastal dunes with herbaceous vegetation - grey dunes [2130]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
002120	Lough Bane and Lough Glass SAC	Within	White-clawed crayfish (Austropotamobius pallipes) [1092], Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
002122	Wicklow Mountains SAC	Within	Calaminarian grasslands of the Violetalia calaminariae [6130], Blanket bogs * if active bog [7130], Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0], Siliceous scree of the montane to snow levels (Androsacetalia alajinae and Galeopsietalia ladani) [8110], Northern Atlantic wet heaths with Erica tetralix [4010], Siliceous rocky slopes with chasmophytic vegetation [8220], Calcareous rocky slopes with chasmophytic vegetation waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110], Otter (Lutra lutra) [1355], Alpine and Boreal heaths [4060], Species-rich Nardus grasslands, on siliceous substrates in mountain areas - and submountain areas in Continental Europe [6230], European dry heaths [4030], Natural dystrophic lakes and ponds [3160]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
002162	River Barrow and River Nore SAC	Within	Estuaries [1130], Atlantic salmon (Salmo salar) [1106], Mudflats and sandflats not covered by seawater at low tide [1140], White-clawed crayfish (Austropotamablus pallipes) [1092], Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Twaite shad (Alosa fallax) [1103], Desmoulin's whorl snall (Vertigo moulinslana) [1016], European dry heaths [4030], Reefs [1170], Sea lamprey (Petromyzon marinus) [1095], Killarney fern (Trichomanes speciosum) [1421], Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260], Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430], Mediterranean salt meadows (Juncetalia maritimi) [1410], River lamprey (Lampetra fluviatilis) [1099], Petrifying springs with tufa formation (Cratoneurion) [7220], Brook lamprey (Lampetra planeri) [1096], Freshwater pearl mussel (Margaritifera margaritifera) [1029], Otter (Lutra lutra) [1355], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion aibae) [91E0], Nore Pearl Mussel (Margaritifera durrovensis) [1990], Old sessile oak woods with llex and Blechnum in the British Isles [91A0], Salicornia and other annuals colonising mud and sand [1310]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
002193	Ireland's Eye SAC	Within	Perennial vegetation of stony banks [1220], Vegetated sea cliffs of the Atlantic and Baltic Coasts [1230]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes

Site Code	European site	Distance (km)	Qualifying Features (Qualifying Interest and Special Conservation Interests)	Potential effects (refer also to Sections 3.3.2 and 3.3.3 above)	Pathway for Significant Effects	Potential for In-Combination Effects
002203	Girley (Drewstown) Bog SAC	Within	Degraded raised bogs still capable of natural regeneration [7120]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
002249	The Murrough Wetlands SAC	Within	Mediterranean salt meadows (Juncetalia maritimi) [1410], Alkaline fens [7230], Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210], Annual vegetation of drift lines [1210], Perennial vegetation of stony banks [1220]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
002299	River Boyne and River Blackwater SAC	Within	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Alkaline fens [7230], River lamprey (Lampetra fluviatilis) [1099], Atlantic salmon (Salmo salar) [1106], Otter (Lutra lutra) [1355]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
002331	Mouds Bog SAC	Within	Depressions on peat substrates of the Rhynchosporion [7150], Active raised bogs [7110], Degraded raised bogs still capable of natural regeneration [7120]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
002340	Moneybeg and Clareisland Bogs SAC	Within	Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
002342	Mount Hevey Bog SAC	Within	Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
003000	Rockabill to Dalkey Island SAC	Within	Harbour porpoise (Phocoena phocoena) [1351], Reefs [1170]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
004006	North Bull Island SPA	Within	Light-bellied Brent Goose (Branta bernicla hrota) [A046], Knot (Calidris canutus) [A143], Dunlin (Calidris alpina) [A149], Grey Plover (Pluvialis squatarola) [A141], Sanderling (Calidris alba) [A144], Wetland and Waterbirds [A999], Black-tailed Godwit (Limosa limosa) [A156], Oystercatcher (Haematopus ostralegus) [A130], Bartailed Godwit (Limosa lapponica) [A157], Redshank (Tringa totanus) [A162], Shelduck (Tadorna tadorna) [A048], Curlew (Numenius arquata) [A160], Shoveler (Anas clypeata) [A052], Golden Plover (Pluvialis apricaria) [A140], Teal (Anas crecca) [A052], Turnstone (Arenaria interpres) [A169], Pintali (Anas acuta) [A054], Blackheaded Gull (Chroicocephalus ridibundus) [A179]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
004015	Rogerstown Estuary SPA	Within	Shoveler (Anas clypeata) [A056], Redshank (Tringa totanus) [A162], Knot (Calidris canutus) [A143], Greylag Goose (Anser anser) [A043], Shelduck (Tadorna tadorna) [A048], Dunlin (Calidris alpina) [A149], Grey Plover (Pluvialis squatarola) [A141], Oystercatcher (Haematopus ostralegus) [A130], Ringed Plover (Charadrius hiaticula) [A137], Black-tailed Godwit (Limosa limosa) [A156], Wetland and Waterbirds [A999], Light-bellied Brent Goose (Branta bernicla hrota) [A046]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
004016	Baldoyle Bay SPA	Within	Light-bellied Brent Goose (Branta bernicla hrota) [A046], Golden Plover (Pluvialis apricaria) [A140], Shelduck (Tadorna tadorna) [A048], Wetland and Waterbirds [A999], Grey Plover (Pluvialis squatarola) [A141], Ringed Plover (Charadrius hiaticula) [A137], Bar-tailed Godwit (Limosa lapponica) [A157]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
004024	South Dublin Bay and River Tolka Estuary SPA	Within	Oystercatcher (Haematopus ostralegus) [A130], Common tern (Sterna hirundo) [A193], Dunlin (Calidris alpina) [A149], Ringed Plover (Charadrius hiaticula) [A137], Sanderling (Calidris alba) [A144], Redshank (Tringa totanus) [A162], Roseate Tern (Sterna dougallii) [A192], Black-headed Gull (Chroicocephalus ridibundus) [A179], Arctic tern (Sterna paradisaea) [A194], Bar-tailed Godwit (Limosa lapponica) [A157], Grey Plover (Pluvialis squatarola) [A141], Knot (Calidris canutus) [A143], Lightbellied Brent Goose (Branta bernicla hrota) [A046], Wetland and Waterbirds [A999]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
004025	Malahide Estuary SPA	Within	Grey Plover ( <i>Pluvialis squatarola</i> ) [A141], Pintail ( <i>Anas acuta</i> ) [A054], Golden Plover ( <i>Pluvialis apricaria</i> ) [A140], Goldeneye ( <i>Bucephala clangula</i> ) [A067], Black-tailed	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is		Yes

Site Code	European site	Distance (km)	Qualifying Features (Qualifying Interest and Special Conservation Interests)	Potential effects (refer also to Sections 3.3.2 and 3.3.3 above)	Pathway for Significant Effects	Potential for In-Combination Effects
			Godwit (Limosa limosa) [A156], Great Crested Grebe (Podiceps cristatus) [A005], Bar-tailed Godwit (Limosa lapponica) [A157], Oystercatcher (Haematopus ostralegus) [A130], Knot (Calidris canutus) [A143], Light-bellied Brent Goose (Branta bernicla hrota) [A046], Shelduck (Tadorna tadorna) [A048], Redshank (Tringa totanus) [A162], Wetland and Waterbirds [A999], Dunlin (Calidris alpina) [A149], Red-breasted Merganser (Mergus serrator) [A069]	hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.		
004040	Wicklow Mountains SPA	Within	Peregrine falcon (Falco peregrinus) [A103], Merlin (Falco columbarius) [A098]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
004063	Poulaphouca Reservoir SPA	Within	Lesser Black-backed Gull (Larus fuscus) [A183], Greylag Goose (Anser anser) [A043]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
004065	Lough Sheelin SPA	Within	Pochard (Aythya ferina) [A059], Goldeneye (Bucephala clangula) [A067], Wetland and Waterbirds [A999], Tufted Duck (Aythya fuligula) [A061], Great Crested Grebe (Podiceps cristatus) [A005]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
004069	Lambay Island SPA	Within	Cormorant (Phalacrocorax carbo) [A017], Herring Gull (Larus argentatus) [A184], Guillemot (Uria aalge) [A199], Fulmar (Fulmarus glacialis) [A009], Greylag Goose (Anser anser) [A043], Puffin (Fratercula arctica) [A204], Shag (Phalacrocorax aristotelis) [A018], Kittiwake (Rissa tridactyla) [A188], Lesser Black-backed Gull (Larus fuscus) [A183], Razorbill (Alca torda) [A200]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
004080	Boyne Estuary SPA	Within	Turnstone (Arenaria interpres) [A169], Sanderling (Calidris alba) [A144], Lapwing (Vanellus vanellus) [A142], Oystercatcher (Haematopus ostralegus) [A130], Knot (Calidris canutus) [A143], Wetland and Waterbirds [A999], Little Tern (Sterna albifrons) [A195], Grey Plover (Pluvialis squatarola) [A141], Golden Plover (Pluvialis apricaria) [A140], Black-tailed Godwit (Limosa limosa) [A156], Shelduck (Tadorna tadorna) [A048], Redshank (Tringa totanus) [A162]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
004113	Howth Head Coast SPA	Within	Kittiwake (Rissa tridactyla) [A188]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
004117	Ireland's Eye SPA	Within	Guillemot ( <i>Uria aalge</i> ) [A199], Kittiwake ( <i>Rissa tridactyla</i> ) [A188], Razorbill ( <i>Alca torda</i> ) [A200], Herring Gull ( <i>Larus argentatus</i> ) [A184], Cormorant ( <i>Phalacrocorax carbo</i> ) [A017]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
004127	Wicklow Head SPA	Within	Black-legged kittiwake (Rissa tridactyla) [A188]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
004158	River Nanny Estuary and Shore SPA	Within	Ringed Plover (Charadrius hiaticula) [A137], Golden Plover (Pluvialis apricaria) [A140], Herring Gull (Larus argentatus) [A184], Oystercatcher (Haematopus ostralegus) [A130], Knot (Calidris canutus) [A143], Wetland and Waterbirds [A999], Sanderling (Calidris alba) [A144]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
004172	Dalkey Islands SPA	Within	Arctic tern (Sterna paradisaea) [A194], Roseate tern (Sterna dougallii) [A192], Common tern (Sterna hirundo) [A193]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
004186	The Murrough SPA	Within	Wetland and Waterbirds [A999], Black-headed Gull (Chroicocephalus ridibundus) [A179], Wigeon (Anas penelope) [A050], Teal (Anas crecca) [A052], Greylag Goose (Anser anser) [A043], Herring Gull (Larus argentatus) [A184], Little Tern (Sterna albifrons) [A195], Red-throated Diver (Gavia stellata) [A001], Light-bellied Brent Goose (Branta bernicla hrota) [A046]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
004232	River Boyne and River	Within	Kingfisher (Alcedo atthis) [A229]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is	Yes	Yes

Site Code	European site	Distance (km)	Qualifying Features (Qualifying Interest and Special Conservation Interests)	Potential effects (refer also to Sections 3.3.2 and 3.3.3 above)	Pathway for Significant Effects	Potential for In-Combination Effects
	Blackwater SPA			hydrologically sensitive. It exists within the Strategy boundary and within a receiving catchment of the Strategy area. Therefore, there are pathways for potential direct effects to the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.		
004122	Skerries Islands SPA	0.31	Purple Sandpiper (Calidris maritima) [A148], Herring Gull (Larus argentatus) [A184], Cormorant (Phalacrocorax carbo) [A017], Light-bellied Brent Goose (Branta bernicla hrota) [A046], Shag (Phalacrocorax aristotelis) [A018], Turnstone (Arenaria interpres) [A169]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. This site lies within .5km of the Strategy boundary in the Irish Sea. The disturbance range for SCI species is accepted to be approximately 2km6. Therefore, there are pathways for potential direct effects to the ecological integrity of the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
002274	Wicklow Reef SAC	0.47	Reefs [1170]	This site is sensitive to hydrological interactions and direct management. The Strategy provides a framework for land use development and activities with potential for construction and operation source effects. This European site exists within .5km of the Strategy boundary in the Irish Sea. However, an assessment of the hydrological functioning and connectivity of the SAC shows that:  Hydrological connections with the reef system drain from the Wicklow Mountains, which are not connected with the Strategy area.  The SAC does not have a direct hydrological connection with the Strategy area (beyond the marine environment which has significant dilution effects associated with it)  The SAC is not within a receiving catchment from the Strategy area  There is no risk to the water quality of the habitats contained therein from surface or groundwater hydrological interactions with the Strategy due to the absence of surface pathways for significant effect.  Groundwater is reliant on and interacts with a myriad of hydrogeological and landscape characteristics <sup>7</sup> , and has been shown to be heavily influenced by the direct management of soil, rivers and streams <sup>8</sup> . It has also been shown that the effects from groundwater contaminants are diluted through volume of water <sup>9</sup> . The Ols are sensitive to direct management effects and hydrological interactions. Considering the lack of connection between the Draft Strategy area and the groundwater sensitive features of the SAC, no pathway for significant effects to the Ols has been identified. Furthermore, there are no policies or objectives of the Draft Strategy that will influence the direct management practices of the SAC.  In summary, there is no risk to the water quality of the habitats contained therein from hydrological interactions with the Strategy are due to the absence of pathways for significant effect. There are no other sources for effects identified from the Strategy that have pathways for effects to the ecological integrity of the SAC, or the habitats contained therei	No	No
000925	The Long Derries, Edenderry SAC	0.57	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210]	This site is sensitive to direct land use management. The Strategy provides a framework for land use development and activities with potential for construction and operation source effects. This is a terrestrial habitat which is functionally isolated from the Strategy area. The habitat is not sensitive to hydrological interactions from surface water or ground water as it is by definition a dry habitat. However, given the proximity of the site to the Strategy area, there is potential for effects to the QI habitat of the site.  Therefore, there are pathways for potential direct effects to the ecological integrity of the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
004014	Rockabill SPA	1.69	Common tern (Sterna hirundo) [A193], Arctic tern (Sterna paradisaea) [A194], Roseate Tern (Sterna dougallii) [A192], Purple Sandpiper (Calidris maritima) [A148]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. This site lies within .5km of the Strategy boundary in the Irish Sea. The disturbance range for SCI species is accepted to be approximately 2km <sup>10</sup> . Therefore, there are pathways for potential direct effects to the ecological integrity of the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
002256	Ballyprior Grassland SAC	2.79	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210]	This site is sensitive to direct land use management. The Strategy provides a framework for land use development and activities with potential for construction and operation source effects. This is a terrestrial habitat which is functionally isolated from the Strategy area. The habitat is not sensitive to hydrological interactions from surface water or ground water as it is by definition a dry habitat and therefore – given the distance – there are no meaningful pathways for effects from the Strategy to the SAC,	No	No

<sup>6</sup> Ruddock, M. & Whitfield, D.P., 2007. A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage, 181.

7 Wehncke, E.V. & Mariano, N.A., 2021. Groundwater and Its Role in Maintaining the Ecological Functions of Ecosystems—A Review. *Intensified Land and Water Use: A Holistic Perspective of Local to Regional Integration*, pp.55-86.

8 Silva, A.C.F. et al. 2012. Estuarine biodiversity as an indicator of groundwater discharge. *Estuarine, Coastal and Shelf Science, 97*, pp.38-43.

9 Lasagna, M. et al. 2013. Effect of the dilution process on the attenuation of contaminants in aquifers. *Environmental earth sciences, 70*(6), pp.2767-2784.

10 Ruddock, M. & Whitfield, D.P., 2007. A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage, 181.

Site Code	European site	Distance (km)	Qualifying Features (Qualifying Interest and Special Conservation Interests)	Potential effects (refer also to Sections 3.3.2 and 3.3.3 above)	Pathway for Significant Effects	Potential for In-Combination Effects
				Thus, there are no sources with pathways for significant effects foreseen and no further assessment is required.		
002121	Lough Lene SAC	2.91	White-clawed crayfish (Austropotamobius pallipes) [1092], Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140]	This site is sensitive to direct land use management. The Strategy provides a framework for land use development and activities with potential for construction and operation source effects. However, an assessment of the connectivity of the SAC with the Strategy area shows that:  The site is 3km outside of the Strategy boundary.  The SAC lies upstream of hydrological connections with the Strategy area.  The SAC is an upland site which drains into the surrounding landscape.  There is no risk to the water quality of the habitats contained therein from surface or groundwater hydrological interactions with the Strategy due to the absence of surface pathways for significant effect.  Groundwater is reliant on and interacts with a myriad of hydrogeological and landscape characteristics <sup>11</sup> , and has been shown to be heavily influenced by the direct management of soil, rivers and streams <sup>12</sup> . It has also been shown that the effects from groundwater contaminants are diluted through volume of water <sup>13</sup> . The OIs are sensitive to direct management effects and hydrological interactions. Considering the lack of connection between the Draft Strategy area and the groundwater sensitive features of the SAC, no pathway for significant effects to the OIs has been identified. Furthermore, there are no policies or objectives of the Draft Strategy that will influence the direct management practices of the SAC.  In summary, there is no risk to the water quality of the habitats contained therein from either hydrological interaction with the Strategy or direct land use management from the Strategy area due to the absence of pathways for effects identified from the Strategy that have pathways for effects to the ecological intergrity of the SAC, or the habitats contained therein.  Thus, there are no other sources with pathways for significant effects foreseen and no further assessment is required.	No	No
004061	Lough Kinale and Derragh Lough SPA	3.95	Tufted Duck (Aythya fuligula) [A061], Wetland and Waterbirds [A999], Pochard (Aythya ferina) [A059]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. This site lies within 4km of the Strategy boundary in the Irish Sea. The disturbance range for SCI species is accepted to be approximately 2km <sup>14</sup> . However, this site has a direct surface hydrological connection with the Strategy area.  Therefore, there are pathways for potential direct effects to the ecological integrity of the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
002201	Derragh Bog SAC	4.6	Bog woodland [91D0], Degraded raised bogs still capable of natural regeneration [7120]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is sensitive to changes to hydrology and direct land use management. This site lies within 5km of the Strategy boundary and is not directly managed by the Strategy area. Raised bog habitats are domed and primarily rainwater fed (ombrotrophic) and are thus isolated from groundwater <sup>15</sup> , however this site has direct a surface hydrological connections with the Strategy area.  Therefore, there are pathways for potential direct effects to the ecological integrity of the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
001459	Clogher Head SAC	6.6	Vegetated sea cliffs of the Atlantic and Baltic coasts [1230], European dry heaths [4030]	This site is sensitive to direct land use management. The Strategy provides a framework for land use development and activities with potential for construction and operation source effects.  However, an assessment of the connectivity of the SAC with the Strategy area shows that:  The site is 6.6km outside of the Strategy boundary.  The SAC has no direct surface hydrological connections with the Strategy area.  There is no risk to the water quality of the habitats contained therein from surface or groundwater hydrological interactions with the Strategy due to the absence of surface pathways for significant effect.  Groundwater is reliant on and interacts with a myriad of hydrogeological and landscape characteristics on the surface of the soli, rivers and streams 17. It has also been shown that the effects from groundwater contaminants are diluted through volume of water 18. The QIs are sensitive to direct management effects. Considering	No	No

<sup>11</sup> Wehncke, E.V. & Mariano, N.A., 2021. Groundwater and Its Role in Maintaining the Ecological Functions of Ecosystems—A Review. *Intensified Land and Water Use: A Holistic Perspective of Local to Regional Integration*, pp.55-86. 12 Silva, A.C.F. et al. 2012. Estuarine biodiversity as an indicator of groundwater discharge. *Estuarine, Coastal and Shelf Science, 97*, pp.38-43.

 <sup>13</sup> Lasagna, M. et al. 2012. Edited for browning and individual distinction of contaminants in aquifers. Environmental earth sciences, 70(6), pp.2767-2784.
 14 Ruddock, M. & Whitfield, D.P., 2007. A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage, 181.
 15 Adapted from NPWS (2019). The Status of EU Protected Habitats and Species in Ireland.

<sup>16</sup> Wehncke, E.V. & Mariano, N.A., 2021. Groundwater and Its Role in Maintaining the Ecological Functions of Ecosystems—A Review. Intensified Land and Water Use: A Holistic Perspective of Local to Regional Integration, pp.55-86.

<sup>&</sup>lt;sup>17</sup> Silva, A.C.F. et al. 2012. Estuarine biodiversity as an indicator of groundwater discharge. Estuarine, Coastal and Shelf Science, 97, pp.38-43.

<sup>18</sup> Lasagna, M. et al. 2013. Effect of the dilution process on the attenuation of contaminants in aquifers. Environmental earth sciences, 70(6), pp.2767-2784.

Site Code	European site	Distance (km)	Qualifying Features (Qualifying Interest and Special Conservation Interests)	Potential effects (refer also to Sections 3.3.2 and 3.3.3 above)	Pathway for Significant Effects	Potential for In-Combination Effects
				the lack of connection between the Draft Strategy area, no pathway for significant effects to the OIs has been identified. Furthermore, there are no policies or objectives of the Draft Strategy that will influence the direct management practices of the SAC.  In summary, there is no risk to the quality of the habitats contained therein from either hydrological interaction with the Strategy or direct land use management from the Strategy area due to the absence of pathways for significant effect.  There are no other sources for effects identified from the Strategy that have pathways for effects to the ecological integrity of the SAC, or the habitats contained therein.  Thus, there are no sources with pathways for significant effects foreseen and no further assessment is required.		
004091	Stabannan- Braganstown SPA	8.71	Greylag goose (Anser anser) [A043]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is sensitive to direct land use management. It exists 8.7km outside of the County boundary, and has no direct surface hydrological connections with the Strategy area.  Considering groundwater interactions: groundwater is reliant on and interacts with a myriad of hydrogeological and landscape characteristics <sup>19</sup> , and has been shown to be heavily influenced by the direct management of soil, rivers and streams <sup>20</sup> . It has also been shown that the effects from groundwater contaminants are diluted through volume of water <sup>21</sup> . The SCI species are sensitive to direct land use management effects. Considering the distance between the Draft Strategy area and the SPA, there is considerable dilution effect, and therefore no significant effects to the SCI species identified. Furthermore, there are no policies or objectives of the Draft Strategy that will influence the direct management practices of the SPA.  SCI species are sensitive to disturbance effects; in general distances beyond 2km are seen to be sufficient to preclude such effects <sup>22,23</sup> . These distances can vary due to factors such as species and/or time of year <sup>24,25</sup> . Given the distance between the Draft Strategy area and the SPA there are no pathways for disturbance effects identified.  In summary, there is no risk to the quality of the habitats contained therein from hydrological interactions with the Strategy are due to the absence of pathways for significant effect.  There are no other sources for effects identified from the Strategy that have pathways for effects to the ecological integrity of the SPA, their SCI species, or the habitats contained therein.  Thus, there are no sources with pathways for significant effects foreseen and no further assessment is required.	No	No
002141	Mountmellick SAC	8.77	Desmoulin's whorl snail (Vertigo moulinsiana) [1016]	This site is sensitive to direct land use management and hydrological interactions. The Strategy provides a framework for land use development and activities with potential for construction and operation source effects.  However, an assessment of the connectivity of the SAC with the Strategy area shows that:  The site is 8.7km outside of the Strategy boundary.  The SAC is upstream of surface hydrological connections with the Strategy area. Considering groundwater interactions: groundwater is reliant on and interacts with a myriad of hydrogeological and landscape characteristics, and has been shown to be heavily influenced by the direct management of soil, rivers and streams. It has also been shown that the effects from groundwater contaminants are diluted through volume of water. The QI is sensitive to direct land use management effects and hydrological interactions. Considering the distance between the Draft Strategy area and the groundwater sensitive features of the SAC, there is considerable dilution effect, and therefore no significant effects to the QI species are identified. Furthermore, there are no policies or objectives of the Draft Strategy that will influence the direct management practices of the SAC. Thus, there is no risk to the water quality of the habitats contained therein from surface or groundwater hydrological interactions with the Strategy due to the absence of surface pathways for significant effect.  In summary, there is no risk to the quality of the habitats contained therein from either hydrological interaction with the Strategy or direct land use management from the Strategy area due to the absence of pathways for significant effect.  There are no other sources for effects identified from the Strategy that have pathways for effects to the ecological integrity of the SAC, or the habitats and QI species contained therein.  Thus, there are no sources with pathways for significant effects foreseen and no further assessment is required.	No	No

<sup>19</sup> Wehncke, E.V. & Mariano, N.A., 2021. Groundwater and Its Role in Maintaining the Ecological Functions of Ecosystems—A Review. Intensified Land and Water Use: A Holistic Perspective of Local to Regional Integration, pp.55-86.

Silva, A.C.F. et al. 2012. Estuarine biodiversity as an indicator of groundwater discharge. Estuarine, Coastal and Shelf Science, 97, pp.38-43.
 Lasagna, M. et al. 2013. Effect of the dilution process on the attenuation of contaminants in aquifers. Environmental earth sciences, 70(6), pp.2767-2784.
 Ruddock, M. and Whitfield, D.P., 2007. A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage, 181.

<sup>23</sup> Bright, J.A., Langston, R. and Anthony, S., 2009. Mapped and written guidance in relation to birds and onshore wind energy development in England. Sandy: RSPB.

<sup>&</sup>lt;sup>24</sup> Botsch, Y., Tablado, Z. and Jenni, L., 2017. Experimental evidence of human recreational disturbance effects on bird-territory establishment. Proceedings of the Royal Society B: Biological Sciences, 284(1858), p.20170846.

<sup>25</sup> Goss-Custard, J.D., Hoppe, C.H., Hood, M.J. and Stillman, R.A., 2020. Disturbance does not have a significant impact on waders in an estuary close to conurbations: importance of overlap between birds and people in time and space. Ibis, 162(3), pp.845-862.

Site Code	European site	Distance (km)	Qualifying Features (Qualifying Interest and Special Conservation Interests)	Potential effects (refer also to Sections 3.3.2 and 3.3.3 above)	Pathway for Significant Effects	Potential for In-Combination Effects
004043	Lough Derravarragh SPALough Derravaragh SPA	9.36	Whooper Swan (Cygnus cygnus) [A038], Coot (Fulica atra) [A125], Wetland and Waterbirds [A999], Pochard (Aythya ferina) [A059], Tufted Duck (Aythya fuligula) [A061]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. This site lies within 9.5km of the Strategy boundary. The disturbance range for SCI species is accepted to be approximately 2km²6. However, this site has a direct surface hydrological connection with the Strategy area.  Therefore, there are pathways for potential direct effects to the ecological integrity of the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
000770	Blackstairs Mountains SAC	10.73	European dry heaths [4030], Northern Atlantic wet heaths with Erica tetralix [4010]	This site is sensitive to direct land use management and hydrological interactions. The Strategy provides a framework for land use development and activities with potential for construction and operation source effects.  However, an assessment of the connectivity of the SAC with the Strategy area shows that:  The site is 10.73km outside of the Strategy boundary.  The SAC is an upland area which drains into the surrounding landscape, thus there are no direct surface hydrological connections with the Strategy area  Considering groundwater interactions: groundwater is reliant on and interacts with a myriad of hydrogeological and landscape characteristics, and has been shown to be heavily influenced by the direct management of soil, rivers and streams. It has also been shown that the effects from groundwater contaminants are diluted through volume of water. The QI is sensitive to direct land use management effects and hydrological interactions. Considering the distance between the Draft Strategy area and the groundwater sensitive features of the SAC, there is considerable dilution effect, and therefore no significant effects to the QI species are identified. Furthermore, there are no policies or objectives of the Draft Strategy that will influence the direct management practices of the SAC. Thus, there is no risk to the water quality of the habitats contained therein from surface or groundwater hydrological interactions with the Strategy due to the absence of surface pathways for significant effect.  In summary, there is no risk to the quality of the habitats contained therein from either hydrological interaction with the Strategy or direct land use management from the Strategy area due to the absence of pathways for significant effect.  There are no other sources for effects identified from the Strategy that have pathways for effects to the ecological integrity of the SAC, or the QI habitats contained therein.  Thus, there are no sources with pathways for significant effects foreseen and no further assessment is r	No	No
002205	Wooddown Bog SAC	11.15	Degraded raised bogs still capable of natural regeneration [7120]	This site is sensitive to direct land use management and hydrological interactions. The Strategy provides a framework for land use development and activities with potential for construction and operation source effects.  However, an assessment of the connectivity of the SAC with the Strategy area shows that:  The site is 11.15km outside of the Strategy boundary.  The SAC has no direct surface hydrological connections with the Strategy area In addition, raised bog habitats are domed and primarily rainwater fed (ombrotrophic) and are thus isolated from groundwater <sup>27</sup> .  In summary, there is no risk to the quality of the habitats contained therein from either hydrological interaction with the Strategy or direct land use management from the Strategy area due to the absence of pathways for significant effect.  There are no other sources for effects identified from the Strategy that have pathways for effects to the ecological integrity of the SAC, or the QI habitat contained therein.  Thus, there are no sources with pathways for significant effects foreseen and no further assessment is required.	No	No
000685	Lough Ennell SAC	12.06	Alkaline fens [7230]	This site is sensitive to direct land use management and hydrological interactions. The Strategy provides a framework for land use development and activities with potential for construction and operation source effects.  However, an assessment of the connectivity of the SAC with the Strategy area shows that:  The site is 12km outside of the Strategy boundary.  The SAC has no direct surface hydrological connectivity with the Strategy area Considering groundwater interactions: groundwater is reliant on and interacts with a myriad of hydrogeological and landscape characteristics, and has been shown to be heavily influenced by the direct management of soil, rivers and streams. It has also been shown that the effects from groundwater contaminants are diluted through volume of water. The QI is sensitive to direct land use management effects and hydrological interactions. Considering the distance between the Draft Strategy area and the groundwater sensitive features of the SAC, there is considerable dilution effect, and therefore no significant effects to the QI habitat are identified. Furthermore, there are no policies	No	No

<sup>&</sup>lt;sup>26</sup> Ruddock, M. & Whitfield, D.P., 2007. A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage, 181. <sup>27</sup> Adapted from NPWS (2019). The Status of EU Protected Habitats and Species in Ireland.

Site Code	European site	Distance (km)	Qualifying Features (Qualifying Interest and Special Conservation Interests)	Potential effects (refer also to Sections 3.3.2 and 3.3.3 above)	Pathway for Significant Effects	Potential for
		(KIII)	(Qualifying interest and Special Conservation interests)		Significant Effects	Effects
				or objectives of the Draft Strategy that will influence the direct management practices of the SAC. Thus, there is no risk to the water quality of the habitats contained therein from surface or groundwater hydrological interactions with the Strategy due to the absence of surface pathways for significant effect.  In summary, there is no risk to the quality of the habitats contained therein from either hydrological interaction with the Strategy or direct land use management from the Strategy area due to the absence of pathways for significant effect.  There are no other sources for effects identified from the Strategy that have pathways for effects to the ecological integrity of the SAC, or the QI habitat contained therein.  Thus, there are no sources with pathways for significant effects foreseen and no further assessment is required.		
000679	Garriskil Bog SAC	12.1	Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is sensitive to changes to hydrology and direct land use management. This site lies 12km from the Strategy boundary and is not directly managed by the Strategy area. Raised bog habitats are domed and primarily rainwater fed (ombrotrophic) and are thus isolated from groundwater <sup>28</sup> , however this site has a direct surface hydrological connection to the Strategy area.  Therefore, there are pathways for potential direct effects to the ecological integrity of the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
004044	Lough Ennell SPA	12.45	Wetland and Waterbirds [A999], Tufted Duck (Aythya fuligula) [A061], Pochard (Aythya ferina) [A059], Coot (Fulica atra) [A125]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is sensitive to hydrological changes and direct land use management.  However, an assessment of the connectivity of the SPA with the Strategy area shows that:  The site is 12.45km outside of the Strategy boundary.  The SPA has no direct surface hydrological connectivity with the Strategy area Considering groundwater interactions: groundwater is reliant on and interacts with a myriad of hydrogeological and landscape characteristics <sup>29</sup> , and has been shown to be heavily influenced by the direct management of soil, rivers and streams <sup>30</sup> . It has also been shown that the effects from groundwater contaminants are diluted through volume of water <sup>31</sup> . The SCI species are sensitive to direct land use management effects. Considering the distance between the Draft Strategy area and the SPA, there is considerable dilution effect, and therefore no significant effects to the SCI species identified. Furthermore, there are no policies or objectives of the Draft Strategy that will influence the direct management practices of the SPA.  SCI species are sensitive to disturbance effects; in general distances beyond 2km are seen to be sufficient to preclude such effects <sup>32,33</sup> . These distances can vary due to factors such as species and/or time of year <sup>34,35</sup> . Given the distance between the Draft Strategy area and the SPA there are no pathways for disturbance effects identified.  In summary, there is no risk to the quality of the habitats contained therein from hydrological interactions with the Strategy are due to the absence of pathways for significant effect. There are no other sources for effects identified from the Strategy that have pathways for effects to the ecological integrity of the SPA, their SCI species, or the habitats contained therein.  Thus, there are no other sources with pathways for significant effects foreseen and no further asses	No	No
000582	Raheenmore Bog SAC	12.73	Active raised bogs [7110], Degraded raised bogs still capable of natural regeneration [7120], Depressions on peat substrates of the Rhynchosporion [7150]	This site is sensitive to direct land use management and hydrological interactions. The Strategy provides a framework for land use development and activities with potential for construction and operation source effects.  However, an assessment of the connectivity of the SAC with the Strategy area shows that:  The site is 12.7km outside of the Strategy boundary.  The SAC lies upstream of a hydrological connection with the Strategy area.  In addition, raised bog habitats are domed and primarily rainwater fed (ombrotrophic) and are thus isolated from groundwater <sup>36</sup> .  In summary, there is no risk to the quality of the habitats contained therein from either hydrological interaction with the Strategy or direct land use management from the Strategy area due to the	No	No

<sup>&</sup>lt;sup>28</sup> Adapted from NPWS (2019). The Status of EU Protected Habitats and Species in Ireland.

<sup>&</sup>lt;sup>29</sup> Wehncke, E.V. & Mariano, N.A., 2021. Groundwater and Its Role in Maintaining the Ecological Functions of Ecosystems—A Review. *Intensified Land and Water Use: A Holistic Perspective of Local to Regional Integration*, pp.55-86. <sup>30</sup> Silva, A.C.F. *et al.* 2012. Estuarine biodiversity as an indicator of groundwater discharge. *Estuarine, Coastal and Shelf Science, 97*, pp.38-43.

<sup>&</sup>lt;sup>31</sup> Lasagna, M. *et al.* 2012. Estudine disturbance disturbance disturbance additional additional content of polymorphisms. *Studing Coastal and Shell Science*, 77, pp.3043.

<sup>32</sup> Ruddock, M. and Whitfield, D.P., 2007. A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage, 181.

<sup>33</sup> Bright, J.A., Langston, R. and Anthony, S., 2009. Mapped and written guidance in relation to birds and onshore wind energy development in England. Sandy: RSPB.

<sup>34</sup> Bötsch, Y., Tablado, Z. and Jenni, L., 2017. Experimental evidence of human recreational disturbance effects on bird-territory establishment. Proceedings of the Royal Society B: Biological Sciences, 284(1858), p.20170846.

<sup>35</sup> Goss-Custard, J.D., Hoppe, C.H., Hood, M.J. and Stillman, R.A., 2020. Disturbance does not have a significant impact on waders in an estuary close to conurbations: importance of overlap between birds and people in time and space. Ibis, 162(3), pp.845-862.

<sup>&</sup>lt;sup>36</sup> Adapted from NPWS (2019). The Status of EU Protected Habitats and Species in Ireland.

Site Code	European site	Distance (km)	Qualifying Features (Qualifying Interest and Special Conservation Interests)	ort Strategy for the Greater Dublin Area 2022-2042  Potential effects (refer also to Sections 3.3.2 and 3.3.3 above)	Pathway for Significant Effects	Potential for In-Combination Effects
				absence of pathways for significant effect.  There are no other sources for effects identified from the Strategy that have pathways for effects to the ecological integrity of the SAC, or the QI habitats contained therein.  Thus, there are no sources with pathways for significant effects foreseen and no further assessment is required.		
002341	Ardagullion Bog SAC	13.55	Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120]	This site is sensitive to direct land use management and hydrological interactions. The Strategy provides a framework for land use development and activities with potential for construction and operation source effects.  However, an assessment of the connectivity of the SAC with the Strategy area shows that:  The site is 13.5km outside of the Strategy boundary.  The SAC has no directly surface hydrological connectivity to the Strategy area. In addition, raised bog habitats are domed and primarily rainwater fed (ombrotrophic) and are thus isolated from groundwater <sup>37</sup> . In summary, there is no risk to the quality of the habitats contained therein from either hydrological interaction with the Strategy or direct land use management from the Strategy area due to the absence of pathways for significant effect.  There are no other sources for effects identified from the Strategy that have pathways for effects to the ecological integrity of the SAC, or the OI habitats contained therein.  Thus, there are no sources with pathways for significant effects foreseen and no further assessment is required.	No	No
004026	Dundalk Bay SPA	14.37	Herring Gull (Larus argentatus) [A184], Ringed Plover (Charadrius hiaticula) [A137], Wetland and Waterbirds [A999], Redshank (Tringa totanus) [A162], Teal (Anas crecca) [A052], Lapwing (Vanellus vanellus) [A142], Greylag Goose (Anser anser) [A043], Curlew (Numenius arquata) [A160], Shelduck (Tadorna tadorna) [A048], Great Crested Grebe (Podiceps cristatus) [A005], Golden Plover (Pluvialis apricaria) [A140], Common Gull (Larus canus) [A182], Knot (Calidris canutus) [A143], Common Scoter (Melanitta nigra) [A065], Oystercatcher (Haematopus ostralegus) [A130], Black-headed Gull (Chroicocephalus ridibundus) [A179], Pintali (Anas acuta) [A054], Mallard (Anas platyrhynchos) [A053], Dunlin (Calidris alpina) [A149], Grey Plover (Pluvialis squatarola) [A141], Bar-tailed Godwit (Limosa lapponica) [A156], Light-bellied Brent Goose (Branta bernicla hrota) [A046], Red-breasted Merganser (Mergus serrator) [A069]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is hydrologically sensitive. This site lies within 14.3km of the Strategy boundary. The disturbance range for SCI species is accepted to be approximately 2km³8. However, this site has a direct surface hydrological connections with the Strategy area.  Therefore, there are pathways for potential direct effects to the ecological integrity of the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
000455	Dundalk Bay SAC	14.64	Salicornia and other annuals colonising mud and sand [1310], Perennial vegetation of stony banks [1220], Mudflats and sandflats not covered by seawater at low tide [1140], Mediterranean salt meadows ( <i>Juncetalia maritimi</i> ) [1410], Atlantic salt meadows ( <i>Glauco-Puccinellietalia maritimae</i> ) [1330], Estuaries [1130]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is sensitive to changes to hydrology and direct land use management. This site lies within 14.6km of the Strategy area and has direct surface hydrological connections with the Strategy area. Therefore, there are pathways for potential direct effects to the ecological integrity of the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
004102	Garriskil Bog SPA	14.74	Greenland White-fronted Goose (Anser albifrons flavirostris) [A395]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is sensitive to changes to hydrology and direct land use management. This site lies 14.7km from the Strategy boundary and is not directly managed by the Strategy area, however this site has a direct surface hydrological connection to the Strategy area.  Therefore, there are pathways for potential direct effects to the ecological integrity of the site from the sources identified above. Therefore, further consideration is required under, Article 6(3), Stage 2 AA.	Yes	Yes
004046	Lough Iron SPA	18.48	Golden Plover (Pluvialis apricaria) [A140], Wigeon (Anas penelope) [A050], Shoveler (Anas clypeata) [A056], Coot (Fulica atra) [A125], Wetland and Waterbirds [A999], Greenland White-fronted Goose (Anser albifrons flavirostris) [A395], Teal (Anas crecca) [A052], Whooper Swan (Cygnus cygnus) [A038]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is sensitive to hydrological changes and direct management. The site exists within 19km of the Strategy boundary. The SCIs for this site are sensitive to surface water hydrological changes. This site is directly surface water connected with the Strategy area. However, considering the distance between the Strategy area and the SCIs of the SPA, there is considerable dilution effect, and therefore no significant effects to the SCIs have been identified. Furthermore, there are no policies or objectives of the Strategy that will influence the direct management practices of the SPA. Therefore, there is no risk to water quality of hydrological interactions or land use management from the Strategy due to the absence of pathways. Given the distances involved, and lack of management of the site by the Strategy, there are no other sources for effects identified that have pathways for effects to the ecological integrity of the SPA. As there are no sources with pathways for significant effects foreseen, no further assessment is	No	No

 <sup>&</sup>lt;sup>37</sup> Adapted from NPWS (2019). The Status of EU Protected Habitats and Species in Ireland.
 <sup>38</sup> Ruddock, M. & Whitfield, D.P., 2007. A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage, 181.

Site Code	European site	Distance (km)	Qualifying Features (Qualifying Interest and Special Conservation Interests)	Potential effects (refer also to Sections 3.3.2 and 3.3.3 above)	Pathway for Significant Effects	Potential for In-Combination Effects
				required.		
004076	Wexford Harbour and Slobs SPA	21.10	Little Grebe (Tachybaptus ruficollis) [A004], Great Crested Grebe (Podiceps cristatus) [A005], Cormorant (Phalacrocorax carbo) [A017], Grey Heron (Ardea cinerea) [A028], Bewick's Swan (Cygnus columbianus bewickii) [A037], Whooper Swan (Cygnus cygnus) [A038], Light-bellied Brent Goose (Branta bernicla hrota) [A046], Shelduck (Tadorna tadorna) [A048], Wigeon (Anas penelope) [A050], Teal (Anas crecca) [A052], Mallard (Anas platyrhynchos) [A053], Pintail (Anas acuta) [A054], Scaup (Aythya marila) [A062], Goldeneye (Bucephala clangula) [A067], Red-breasted Merganser (Mergus serrator) [A069], Hen Harrier (Circus cyaneus) [A082], Coot (Fulica atra) [A125], Oystercatcher (Haematopus ostralegus) [A130], Golden Plover (Pluvialis apricaria) [A140], Grey Plover (Pluvialis squatarola) [A141], Lapwing (Vanellus vanellus) [A142], Knot (Calidris canutus) [A143], Sanderling (Calidris alba) [A144], Dunlin (Calidris alpina) [A149], Black-tailed Godwit (Limosa limosa) [A156], Bar-tailed Godwit (Limosa lapponica) [A157], Curlew (Numenius arquata) [A160], Redshank (Tringa totanus) [A162], Black-headed Gull (Chroicocephalus ridibundus) [A179], Lesser Black-backed Gull (Larus fuscus) [A183], Little Tern (Sterna albifrons) [A195], Greenland White-fronted Goose (Anser albifrons flavirostris) [A395], Wetland and Waterbirds [A999]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is sensitive to hydrological changes and direct management. The site exists within 21km of the Strategy boundary. The SCIs for this site are sensitive to surface water hydrological changes. This site is directly surface water connected with the Strategy area.  However, considering the distance between the Strategy area and the SCIs of the SPA, there is considerable dilution effect, and therefore no significant effects to the SCIs have been identified. Furthermore, there are no policies or objectives of the Strategy that will influence the direct management practices of the SPA.  Therefore, there is no risk to water quality of hydrological interactions or land use management from the Strategy due to the absence of pathways. Given the distances involved, and lack of management of the site by the Strategy, there are no other sources for effects identified that have pathways for effects to the ecological integrity of the SPA.  As there are no sources with pathways for significant effects foreseen, no further assessment is required.	No	No
004019	The Raven SPA	31.17	Red-throated Diver ( <i>Gavia stellata</i> ) [A001], Cormorant ( <i>Phalacrocorax carbo</i> ) [A017], Common Scoter ( <i>Melanitta nigra</i> ) [A065], Grey Plover ( <i>Pluvialis squatarola</i> ) [A141], Sanderling ( <i>Calidris alba</i> ) [A144], Greenland White-fronted Goose ( <i>Anser albifrons flavirostris</i> ) [A395], Wetland and Waterbirds [A999]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is sensitive to hydrological changes and direct management. The site exists within 31km of the Strategy boundary. The SCIs for this site are sensitive to surface water hydrological changes. This site is directly surface water connected with the Strategy area. However, considering the distance between the Strategy area and the SCIs of the SPA, there is considerable dilution effect, and therefore no significant effects to the SCIs have been identified. Furthermore, there are no policies or objectives of the Strategy that will influence the direct management practices of the SPA.  Therefore, there is no risk to water quality of hydrological interactions or land use management from the Strategy due to the absence of pathways. Given the distances involved, and lack of management of the site by the Strategy, there are no other sources for effects identified that have pathways for effects to the ecological integrity of the SPA.  As there are no sources with pathways for significant effects foreseen, no further assessment is required.	No	No
000440	Lough Ree SAC	42.15	Alkaline fens [7230], Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110], Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation [3150], Alluvial forests with Alnus glutinosa and Fraxinus excelsior ( <i>Alno-Padion, Alnion incanae, Salicion albae</i> ) [91E0], Otter ( <i>Lutra lutra</i> ) [1355], Semi-natural dry grasslands and scrubland facies on calcareous substrates ( <i>Festuco-Brometalia</i> ) * important orchid sites [6210], Bog woodland [91D0], Limestone pavements [8240]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is sensitive to hydrological changes and direct management. The site exists within 42km of the Strategy boundary. The Ols for this site are sensitive to surface water hydrological changes. This site is directly surface water connected with the Strategy area.  However, considering the distance between the Strategy area and the Ols of the SAC, there is considerable dilution effect, and therefore no significant effects to the Ols have been identified. Furthermore, there are no policies or objectives of the Strategy that will influence the direct management practices of the SAC.  Therefore, there is no risk to water quality of hydrological interactions or land use management from the Strategy due to the absence of pathways. Given the distances involved, and lack of management of the site by the Strategy, there are no other sources for effects identified that have pathways for effects to the ecological integrity of the SAC.  As there are no sources with pathways for significant effects foreseen, no further assessment is required.	No	No
004064	Lough Ree SPA	42.18	Teal (Anas crecca) [A052], Whooper Swan (Cygnus cygnus) [A038], Tufted Duck (Aythya fuligula) [A061], Golden Plover (Pluvialis apricaria) [A140], Goldeneye (Bucephala clangula) [A067], Wetland and Waterbirds [A999], Wigeon (Anas penelope) [A050], Shoveler (Anas chypeata) [A056], Coot (Fulica atra) [A125], Common Scoter (Melanitta nigra) [A065], Common tern (Sterna hirundo) [A193], Mallard (Anas platyrhynchos) [A053], Lapwing (Vanellus vanellus) [A142], Little Grebe (Tachybaptus ruficollis) [A004]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is sensitive to hydrological changes and direct management. The site exists within 41km of the Strategy boundary. The SCIs for this site are sensitive to surface water hydrological changes. This site is directly surface water connected with the Strategy area. However, considering the distance between the Strategy area and the SCIs of the SPA, there is considerable dilution effect, and therefore no significant effects to the SCIs have been identified. Furthermore, there are no policies or objectives of the Strategy that will influence the direct management practices of the SPA. Therefore, there is no risk to water quality of hydrological interactions or land use management from the Strategy due to the absence of pathways. Given the distances involved, and lack of management of the site by the Strategy, there are no other sources for effects identified that have pathways for effects to the ecological integrity of the SPA. As there are no sources with pathways for significant effects foreseen, no further assessment is required.	No	No
004096	Middle Shannon Callows SPA	47.22	Wigeon (Anas penelope) [A050], Black-tailed Godwit (Limosa limosa) [A156], Black-headed Gull (Chroicocephalus ridibundus) [A179], Corncrake (Crex crex) [A122],	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is	No	No

Site Code	European site	Distance (km)	Qualifying Features (Qualifying Interest and Special Conservation Interests)	Potential effects (refer also to Sections 3.3.2 and 3.3.3 above)	Pathway for Significant Effects	Potential for In-Combination Effects
			Wetland and Waterbirds [A999], Golden Plover ( <i>Pluvialis apricaria</i> ) [A140], Whooper Swan ( <i>Cygnus cygnus</i> ) [A038], Lapwing ( <i>Vanellus vanellus</i> ) [A142]	sensitive to hydrological changes and direct management. The site exists within 47km of the Strategy boundary. The SCIs for this site are sensitive to surface water hydrological changes. This site is directly surface water connected with the Strategy area.  However, considering the distance between the Strategy area and the SCIs of the SPA, there is considerable dilution effect, and therefore no significant effects to the SCIs have been identified. Furthermore, there are no policies or objectives of the Strategy that will influence the direct management practices of the SPA.  Therefore, there is no risk to water quality of hydrological interactions or land use management from the Strategy due to the absence of pathways. Given the distances involved, and lack of management of the site by the Strategy, there are no other sources for effects identified that have pathways for effects to the ecological integrity of the SPA.  As there are no sources with pathways for significant effects foreseen, no further assessment is required.		Literal
000216	River Shannon Callows SAC	47.94	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410], Lowland hay meadows (Alopecurus pratensis, Sangulsorba officinalis) [6510], Limestone pavements [8240], Alkaline fens [7230], Otter (Lutra lutra) [1355], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion Incanae, Salicion albae) [91E0]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is sensitive to hydrological changes and direct management. The site exists within 48km of the Strategy boundary. The OIs for this site are sensitive to surface water hydrological changes. This site is directly surface water connected with the Strategy area.  However, considering the distance between the Strategy area and the OIs of the SAC, there is considerable dilution effect, and therefore no significant effects to the OIs have been identified. Furthermore, there are no policies or objectives of the Strategy that will influence the direct management practices of the SAC.  Therefore, there is no risk to water quality of hydrological interactions or land use management from the Strategy due to the absence of pathways. Given the distances involved, and lack of management of the site by the Strategy, there are no other sources for effects identified that have pathways for effects to the ecological integrity of the SAC.  As there are no sources with pathways for significant effects foreseen, no further assessment is required.	No	No
002137	Lower River Suir SAC	54.31	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430], White-clawed crayfish (Austropotamobius pallipes) [1092], Otter (Lutra lutra) [1355], Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Sea lamprey (Petromyzon marinus) [1095], Twaite shad (Alosa fallax) [1103], Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0], Freshwater pearl mussel (Margaritifera margaritifera) [1029], River lamprey (Lampetra fluviatilis) [1099], Mediterranean salt meadows (Juncetalia maritimi) [1410], Atlantic salt meadows (Glauco-Puccinelilietalia maritimae) [1330], Brook lamprey (Lampetra planeri) [1096], Taxus baccata woods of the British Isles [91J0], Atlantic salmon (Salmo salar) [1106]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is sensitive to hydrological changes and direct management. The site exists within 55km of the Strategy boundary. The OIs for this site are sensitive to surface water hydrological changes. This site is directly surface water connected with the Strategy area.  However, considering the distance between the Strategy area and the OIs of the SAC, there is considerable dilution effect, and therefore no significant effects to the OIs have been identified. Furthermore, there are no policies or objectives of the Strategy that will influence the direct management practices of the SAC.  Therefore, there is no risk to water quality of hydrological interactions or land use management from the Strategy due to the absence of pathways. Given the distances involved, and lack of management of the site by the Strategy, there are no other sources for effects identified that have pathways for effects to the ecological integrity of the SAC.  As there are no sources with pathways for significant effects foreseen, no further assessment is required.	No	No
004097	River Suck Callows SPA	59.34	Lapwing (Vanellus vanellus) [A142], Golden Plover (Pluvialis apricaria) [A140], Wigeon (Anas penelope) [A050], Whooper Swan (Cygnus cygnus) [A038], Greenland White-fronted Goose (Anser albifrons flavirostris) [A395], Wetland and Waterbirds [A999]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is sensitive to hydrological changes and direct management. The site exists within 60km of the Strategy boundary. The SCIs for this site are sensitive to surface water hydrological changes. This site is directly surface water connected with the Strategy area.  However, considering the distance between the Strategy area and the SCIs of the SPA, there is considerable dilution effect, and therefore no significant effects to the SCIs have been identified. Furthermore, there are no policies or objectives of the Strategy that will influence the direct management practices of the SPA.  Therefore, there is no risk to water quality of hydrological interactions or land use management from the Strategy due to the absence of pathways. Given the distances involved, and lack of management of the site by the Strategy, there are no other sources for effects identified that have pathways for effects to the ecological integrity of the SPA.  As there are no sources with pathways for significant effects foreseen, no further assessment is required.	No	No
002241	Lough Derg, North-east Shore SAC	66.6	Limestone pavements [8240], Alkaline fens [7230], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Taxus baccata woods of the British Isles [91J0], Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210], Juniperus communis formations on heaths or calcareous grasslands [5130]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is sensitive to hydrological changes and direct management. The site exists within 67km of the Strategy boundary. The Ols for this site are sensitive to surface water hydrological changes. This site is directly surface water connected with the Strategy area.  However, considering the distance between the Strategy area and the Ols of the SAC, there is considerable dilution effect, and therefore no significant effects to the Ols have been identified.	No	No

Site Code	European site	Distance (km)	Appropriate Assessment of the Draft Transpo Qualifying Features (Qualifying Interest and Special Conservation Interests)	Potential effects (refer also to Sections 3.3.2 and 3.3.3 above)	Significant Effects	Potential for In-Combination Effects
				Furthermore, there are no policies or objectives of the Strategy that will influence the direct management practices of the SAC.  Therefore, there is no risk to water quality of hydrological interactions or land use management from the Strategy due to the absence of pathways. Given the distances involved, and lack of management of the site by the Strategy, there are no other sources for effects identified that have pathways for effects to the ecological integrity of the SAC.  As there are no sources with pathways for significant effects foreseen, no further assessment is required.		
004058	Lough Derg (Shannon) SPA	66.97	Wetland and Waterbirds [A999], Tufted Duck (Aythya fuligula) [A061], Cormorant (Phalacrocorax carbo) [A017], Common tern (Sterna hirundo) [A193], Goldeneye (Bucephala clangula) [A067]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is sensitive to hydrological changes and direct management. The site exists within 67km of the Strategy boundary. The SCIs for this site are sensitive to surface water hydrological changes. This site is directly surface water connected with the Strategy area.  However, considering the distance between the Strategy area and the SCIs of the SPA, there is considerable dilution effect, and therefore no significant effects to the SCIs have been identified. Furthermore, there are no policies or objectives of the Strategy that will influence the direct management practices of the SPA.  Therefore, there is no risk to water quality of hydrological interactions or land use management from the Strategy due to the absence of pathways. Given the distances involved, and lack of management of the site by the Strategy, there are no other sources for effects identified that have pathways for effects to the ecological integrity of the SPA.  As there are no sources with pathways for significant effects foreseen, no further assessment is required.	No	No
002165	Lower River Shannon SAC	77.03	Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Estuaries [1130], Freshwater pearl mussel (Margaritifera margaritifera) [1029], Mediterranean salt meadows (Juncetalia maritimi) [1410], Perennial vegetation of stony banks [1220], Atlantic salmon (Salmo salar) [1106], Large shallow inlets and bays [1160], Vegetated sea cliffs of the Atlantic and Baltic coasts [1230], Coastal lagoons [1150], Mudflats and sandflats not covered by seawater at low tide [1140], River lamprey (Lampetra fluviatilis) [1099], Sea lamprey (Petromyzon marinus) [1095], Bottlenose dolphin (Tursiops truncatus) [1349], Sandbanks which are slightly covered by sea water all the time [1110], Reefs [1170], Otter (Lutra lutra) [1355], Salicornia and other annuals colonising mud and sand [1310], Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410], Brook lamprey (Lampetra planeri) [1096], Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is sensitive to hydrological changes and direct management. The site exists within 77km of the Strategy boundary. The Ols for this site are sensitive to surface water hydrological changes. This site is directly surface water connected with the Strategy area.  However, considering the distance between the Strategy area and the Ols of the SAC, there is considerable dilution effect, and therefore no significant effects to the Ols have been identified. Furthermore, there are no policies or objectives of the Strategy that will influence the direct management practices of the SAC.  Therefore, there is no risk to water quality of hydrological interactions or land use management from the Strategy due to the absence of pathways. Given the distances involved, and lack of management of the site by the Strategy, there are no other sources for effects identified that have pathways for effects to the ecological integrity of the SAC.  As there are no sources with pathways for significant effects foreseen, no further assessment is required.	No	No
004077	River Shannon and River Fergus Estuaries SPA	111.06	Bar-tailed Godwit ( <i>Limosa lapponica</i> ) [A157], Knot ( <i>Calidris canutus</i> ) [A143], Blacktailed Godwit ( <i>Limosa limosa</i> ) [A156], Greenshank ( <i>Tringa nebularia</i> ) [A164], Redshank ( <i>Tringa totanus</i> ) [A162], Cormorant ( <i>Phalacrocorax carbo</i> ) [A017], Whooper Swan ( <i>Cygnus cygnus</i> ) [A038], Wigeon ( <i>Anas penelope</i> ) [A050], Curlew ( <i>Numenius arquata</i> ) [A160], Light-bellied Brent Goose ( <i>Branta bernicla hrota</i> ) [A046], Dunlin ( <i>Calidris alpina</i> ) [A149], Ringed Plover ( <i>Charadrius hiaticula</i> ) [A137], Lapwing ( <i>Vanellus vanellus</i> ) [A142], Black-headed Gull ( <i>Chroicocephalus ridibundus</i> ) [A179], Pintali ( <i>Anas acuta</i> ) [A054], Teal ( <i>Anas crecca</i> ) [A052], Scaup ( <i>Aythya marila</i> ) [A062], Shoveler ( <i>Anas clypeata</i> ) [A056], Golden Plover ( <i>Pluvialis apricaria</i> ) [A140], Grey Plover ( <i>Pluvialis squatarola</i> ) [A141], Shelduck ( <i>Tadorna tadorna</i> ) [A048], Wetland and Waterbirds [A999]	The Strategy provides a framework for land use development and activities with potential for construction and operation source effects throughout the Strategy area. This European site is sensitive to hydrological changes and direct management. The site exists within 111km of the Strategy boundary. The SCIs for this site are sensitive to surface water hydrological changes. This site is directly surface water connected with the Strategy area.  However, considering the distance between the Strategy area and the SCIs of the SPA, there is considerable dilution effect, and therefore no significant effects to the SCIs have been identified. Furthermore, there are no policies or objectives of the Strategy that will influence the direct management practices of the SPA.  Therefore, there is no risk to water quality of hydrological interactions or land use management from the Strategy due to the absence of pathways. Given the distances involved, and lack of management of the site by the Strategy, there are no other sources for effects identified that have pathways for effects to the ecological integrity of the SPA.  As there are no sources with pathways for significant effects foreseen, no further assessment is required.	No	No

## 3.4 Other Plans and Programmes

Article 6(3) of the Habitats Directive requires an assessment of a plan or project to consider other plans or programmes that might, in combination with the plan or project, have the potential to adversely affect European sites. Appendix IV outlines a selection of plans or projects that may interact with the Strategy to cause in-combination effects to European sites. These plans, programmes, strategies etc. were considered throughout the assessment.

The Strategy sits within a hierarchy of statutory documents setting out public policy for, among other things, land use planning, infrastructure, sustainable development, recreation, environmental protection and environmental management, which have been subject to their own environmental assessment processes, as relevant. The Strategy must comply with relevant higher-level strategic actions and will, in turn, guide lower-level strategic actions.

The Strategy aligns with legislation and documents setting out public policy for land use, transport and climate action and will be incorporated into the review and preparation of these documents. These include the National Planning Framework (and associated National Development Plan), the Strategic Investment Framework for Land Transport, the National Investment Framework for Transport in Ireland, the Regional Economic and Spatial Strategy for the Eastern and Midland Region (as adopted by the Eastern and Midland Regional Assembly, and finalised in January 2020) and associated Dublin Metropolitan Area Strategic Plan, the City and County Development Plans, Local Area Plans and Planning Schemes. Certain transport related proposals already provided for by these documents (and considered by their environmental assessments) are amongst those included within the Strategy. The Transport Strategy is based on national policies on sustainability as set out in the Climate Action Plan and recent climate action legislation.

In order to be realised, projects included in the Strategy (in a similar way to other projects from any other sector) will have to comply, as relevant, with various legislation, policies, plans and programmes (including requirements for lower-tier Appropriate Assessment, Environmental Impact Assessment and other licencing requirements as appropriate) that form the statutory decision-making and consent-granting framework.

All projects within the Strategy area and receiving environment will be considered in combination with any and all lower tier projects that may arise due to the implementation of the Strategy. Given the uncertainties that exist with regard to the scale and location of developments facilitated by the Strategy, it is recognised that the identification of in-combination effects is limited and that the assessment of incombination effects will need to be undertaken in a more comprehensive manner at the project-level.

The hierarchy of strategic actions, such as plans and programmes, within which the Strategy sits include those detailed in Appendix IV<sup>39</sup>.

## 3.5 AA Screening Conclusion

The effects that could arise from the Strategy have been examined in the context of several factors that could potentially affect the integrity of any European site. On the basis of the findings of this Screening for AA, it is concluded that the Strategy:

- Is not directly connected with or necessary to the management of any European site; and
- May, if unmitigated, have significant adverse effects on 66 (no.) European sites.

Therefore, a Stage 2 AA is required for the Strategy (see Section 4 of this report). An AA Screening Determination undertaken by the planning authority is provided at Figure 3.3.

-

<sup>&</sup>lt;sup>39</sup> Appendix IV is not intended to be a full and comprehensive review of EU Directives, the transposing regulations or the regulatory framework for environmental protection and management. The information is not exhaustive and it is recommended to consult the Directive, Regulation, Plan or Programme to become familiar with the full details of each.

#### **Screening for Appropriate Assessment**

#### Determination

under the
European Communities (Birds and Natural Habitats) Regulations 2011
(as amended)
for the

#### Draft Transport Strategy for the Greater Dublin Area 2022-2042

In order to comply with the requirements of Regulation 42 of the European Communities (Birds and Natural Habitats) Regulations, 2011 (S.I. No. 477), as amended, this determination is being made by the National Transport Authority relating to the potential for the Draft Transport Strategy for the Greater Dublin Area 2022-2042 to have effects on the integrity of European sites.

In making the determination that Appropriate Assessment (AA) is required, information on the potential effects on the integrity of European Sites (to be reproduced in the Natura Impact Statement that will accompany the Draft Strategy on public display) has been taken into account. The screening process assessed whether the Draft Strategy had the potential to affect the integrity of any European site, either alone or in combination with other plans and projects.

The screening process demonstrates that an AA of the Draft Strategy is required as, inter alia, taking into account Qualifying Interest and Special Conservation interest species and habitats and their associated threats/vulnerabilities, there would be potential in the absence of mitigation for the integrity of European sites to be affected by the Strategy. Such effects could arise through, for example:

- Loss/reduction of habitat area;
- · Habitat or species fragmentation;
- Disturbance to key species;
- · Reduction in species density; and/or
- Changes in key indicators of conservation value (water quality etc.).

The undersigned has carefully considered the information identified above and agrees with and adopts the reasoning and conclusion referred to.

The undersigned hereby determines pursuant to Regulation 42 of S.I. No. 477 of 2011, as amended, and for the purposes of Article 6(3) of the Habitats Directive that: it could not be excluded, on the basis of objective information, that the Draft Strategy, individually, or in combination with other plans and projects would have likely significant effects on a European site; and, therefore, an AA is required.

Signatory:

Date:

30th September 2021

Jue Cialan

Figure 3.3 AA Screening Determination

# **Section 4** Stage 2 Appropriate Assessment

#### 4.1 Introduction

The Stage 2 AA assesses whether the Strategy alone, or in-combination with other plans, programmes, and/or projects, would result in adverse effects on the integrity of the 66 European sites brought forward from screening (those considered on Table 3.1 for which there is "Potential Pathway for Significant Effects" and/or "Potential for In-Combination Effects"), with respect to site structure, function and/or conservation objectives.

## 4.2 Characterisation of European sites Potentially Affected

The AA Screening identified 66 European sites with pathway receptors for potential effects arising from the implementation of the Strategy. Appendix I characterises each of the qualifying features of the 66 European sites brought forward from Stage 1 in context of each of the sites' vulnerabilities. Each of these site characterisations were taken from the NPWS website<sup>40</sup>.

## 4.3 Identifying and Characterising Potential Significant Effects

The following parameters can be used when characterising impacts<sup>41</sup>:

**Direct and Indirect Impacts** - An impact can be caused either as a direct or as an indirect consequence of a Plan/Project. **Magnitude** - Magnitude measures the size of an impact, which is described as high, medium, low, very low or negligible. **Extent** - The area over that the impact occurs – this should be predicted in a quantified manner.

**Duration** - The time that the effect is expected to last prior to recovery or replacement of the resource or feature.

- Temporary: Up to 1 Year;
- Short Term: The effects would take 1-7 years to be mitigated;
- Medium Term: The effects would take 7-15 years to be mitigated;
- Long Term: The effects would take 15-60 years to be mitigated; and
- Permanent: The effects would take 60+ years to be mitigated.

Likelihood - The probability of the effect occurring taking into account all available information.

- Certain/Near Certain: >95% chance of occurring as predicted;
- Probable: 50-95% chance as occurring as predicted;
- Unlikely: 5-50% chance as occurring as predicted; and
- Extremely Unlikely: <5% chance as occurring as predicted.

**Ecologically Significant Impact** - An impact (negative or positive) on the integrity of a defined site or ecosystem and/or the conservation status of habitats or species within a given geographic area.

Integrity of a Site - The coherence of its ecological structure and function, across its whole area, which enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified.

The Habitats Directive requires the focus of the assessment at this stage to be on the integrity of the site as indicated by its Conservation Objectives. It is an aim of NPWS to draw up conservation management plans for all areas designated for nature conservation. These plans will, among other things, set clear objectives for the conservation of the features of interest within a site.

Site-Specific Conservation Objectives (SSCOs) have been prepared for a number of European sites. These detailed SSCOs aim to define favourable conservation condition for the qualifying habitats and species at that site by setting targets for appropriate attributes that define the character habitat. The maintenance of the favourable condition for these habitats and species at the site level will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

**Favourable conservation status** of a **species** can be described as being achieved when: 'population data on the species concerned indicate that it is maintaining itself, and the natural range of the species is neither being reduced or likely to be reduced for the foreseeable future, and there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.'

**Favourable conservation status** of a **habitat** can be described as being achieved when: 'its natural range, and area it covers within that range, is stable or increasing, and the ecological factors that are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and the conservation status of its typical species is favourable'.

Generic Conservation Objective for SACs:

<sup>40</sup> Last accessed 21st July 2021; https://www.npws.ie/protected-sites

<sup>&</sup>lt;sup>41</sup> These descriptions are informed by publications including: Chartered Institute of Ecology and Environmental Management (2016) "Guidelines for ecological impact assessment"; Environmental Protection Agency (2002) "Guidelines on the Information to be contained in Environmental Impact Statements"; and National Roads Authority (2009) "Guidelines for Assessment of Ecological Impacts of National Roads Schemes".

To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species that
the SAC has been selected

#### Generic Conservation Objective for SPAs:

• To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.

#### 4.3.1 Types of Potential Effects

Assessment of potential effects on European sites is conducted utilising a standard source-pathway model (see approach referred to under Sections 1.3 and 3). The 2001 European Commission AA guidance outlines the following potential changes that may occur at a designated site, which may result in effects on the integrity and function of that site: loss/reduction of habitat area; habitat or species fragmentation; disturbance to key species; reduction in species density; changes in key indicators of conservation value (water quality etc.); and climate change. Each of these potential changes are considered below and in Table 4.1 with reference to the QIs/SCIs of all of the European sites brought forward from Stage 1 of the AA process (see Section 3).

#### 4.3.1.1 Loss/Reduction of Habitat Area

The Strategy provides for infrastructural development across the Strategy area. The Strategy provides for accessibility and transport development with a focus on prioritising sustainable transport. The development of all infrastructural works such as water services, energy provisions, motor facilities, roadways, access tracks and pathways etc. have associated construction phase effects. These potential effects include land take, habitat destruction, disturbance effects, light pollution, dust, hydrological interactions, airborne pollution, excessive noise etc. Therefore, mitigation measures are required to ensure that there are no significant adverse effects due to construction on the ecological integrity of any European site.

As identified above the Strategy area has several European sites within it. Therefore, there is potential for effects to European sites through urbanisation and direct habitat loss on foot of the implementation of the Strategy; however, several mitigation measures have been integrated into the Strategy to ensure that its implementation will not result in the loss of any habitat necessary for the ecological integrity of any European site. These mitigation measures are listed in Section 5, which include measures for construction environmental management plans and EU site considerations<sup>42</sup>.

These policies ensure that there will be no loss of habitat or supporting habitat for species that are necessary to maintain the ecological integrity of European sites throughout the lifetime of the Strategy.

#### 4.3.1.2 Habitat or species Fragmentation

As previously stated, the Strategy provides for infrastructure developments that have associated construction and operational phase effects. These effects could result in the fragmentation of habitats and/or species through light pollution, habitat loss, removal of habitat stepping stones, etc. Therefore, mitigation measures are required to ensure that there are no significant adverse effects in relation to fragmentation on the ecological integrity of any European site.

The Strategy recognises the role of non-designated sites for the maintenance and enhancement of European sites due to the connectivity and accessibility of ecological resources. Chapter 18 of the Draft Strategy provides measures to minimise potential fragmentation and to facilitate the enhancement of ecological corridors such as riparian zone; such as:

- "Biodiversity and Ecological Networks"
- "Protection of Riparian Zone and Waterbodies and Watercourses"
- "Biodiversity including non-designated biodiversity"

These mitigation measures are listed in Section 5 of this report. Inappropriate lighting will be minimised through the implementation of the measures also set out in Section 5.

<sup>&</sup>lt;sup>42</sup>Such as "Protection of Biodiversity including Natura 2000 Network" – refer to Chapter 18 of the Draft Strategy

Further to these provisions there are policy objectives related to specific ecological resources and/or habitats such as waterways, wetlands and peatlands etc. These policies apply to all plans, programmes and/or projects that may arise due to the implementation of the Strategy and will ensure that habitat or species fragmentation will not occur in relation to the connectivity of the ecological resources necessary to maintain the ecological integrity of European sites throughout the lifetime of the Strategy.

#### 4.3.1.3 Disturbance to Key Species

Disturbance effects are cause by any activity that has potential to alter the movement patterns/distribution of species. Disturbance effects can relate to direct disturbance through human activity/movement or noise pollution. This is particularly relevant in relation to transportation in general, from the perspective that many road networks or recreational (cycle/walking) routes in the Strategy area are through or adjacent to European sites. Thus, appropriate mitigation measures for disturbance to key species are set out in Section 5.

The Strategy accounts for noise pollution effects through its measures affording protection to European sites by ensuring any projects that arise from the implementation of the Strategy avoid or minimise noise in compliance with the Environmental Noise Directive 2002/49/EC and enabling Regulations (SI 140 of 2006) associated National Regulations through county/agglomeration-level Noise Action Plans. Other disturbance effects could relate to a reduction in habitat quality due to anthropocentric sensitivities for species such as the hen harrier (which is known to occur within the area encompassed by the Strategy. Policies to ensure the protection of habitat quality have been built into the Strategy; identified above (further details see Section 5).

These measures are robust to ensure that any sensitive habitat features or species will be identified and only compliant applications will be granted. All of the policies related to positive effects for Biodiversity are detailed in Section 5 of this report.

#### 4.3.1.4 Reduction in species density

Species densities are reliant on species distributions, habitat condition, connectivity of ecological resources and availability of resources such as prey/food. The Strategy introduces potential sources for effects to affect these four determinant factors for species densities in the form of construction phase effects such as habitat destruction, light pollution, hydrological interaction or operational effects such as disturbance effects, habitat encroachment, increased trampling due to better access via cycleways/walkways etc.

Reductions in species density could also occur where collision risks are introduced to previously undeveloped areas where vulnerable species may be present. The development of overhead power lines associated with the electrification of rail infrastructure could present a collision hazard to vulnerable bird species. The development of rail and roads in particularly sensitive locations could result in collision between vehicles and wildlife.

However, the Strategy contains provisions to enhance biodiversity, landscape and the environment within the Greater Dublin Area (see Section 5 for these provisions). Similarly, the Strategy recognises the role of non-designated sites for the maintenance and enhancement of European sites due to the connectivity and accessibility of ecological resources as well as those detailed above. Further to these provisions there are policy objectives related to specific ecological resources and/or habitats in Section 5.

These policies apply to all plans, programmes and projects that may arise due to the implementation of the Strategy. There are also a number of provisions relating to protective buffer zones, further assessment requirements as well as commitments to maintaining water quality standards etc. For further details in relation to the mitigation measures incorporated into the Strategy see Section 5 of this AA NIS.

#### 4.3.1.5 Changes of Indicators of Conservation Value

Water quality is the primary macro indicator of conservation value. The Strategy contains many robust measures to ensure the protection of both surface and ground water quality. These measures include those under the following headings:

- "Water Framework Directive and associated legislation"
- "River Basin Management Plan"
- "Bathing Water"
- "Flood Risk Management Guidelines"
- "Surface Water Drainage and Sustainable Drainage Systems (SuDs)"

Development within the vicinity of groundwater or surface water dependant European sites will not be permitted where there is potential for a likely significant effect on the groundwater or surface water supply to the European sites. Measures that specifically relate to the protection of water quality which account for potential effects to European sites are detailed in Section 5. Similarly, emissions to air have potential to adversely affect the conservation status of European sites; however, the Strategy contains measures which account for this.

#### 4.3.1.6 Climate change

The Strategy introduces a number of measures to reduce carbon emissions and move towards renewable energy sources and zero emissions projects – detailed throughout the Strategy. In addition to these measures there are measures integrated into the Strategy to minimise and avoid potential sources for emissions to air (see Section 5 for further details). Therefore, there are no sources for significant effects to climate change factors identified within the Strategy having regard for the measures identified above and in Section 5 below. Therefore, there are no changes projected to arise from climate change to the degree that it would affect the QIs or SCIs of the European sites considered.

#### Table 4.1 Characterisation of Potential Effects arising from the Strategy

Site Code	Site Name <sup>43</sup>	Characterisation of Potential Effects <sup>44</sup>
000006	Killyconny Bog (Cloghbally) SAC	The known threats to this site are: landfill, land reclamation and drying out, vandalism, paths, tracks, cycling tracks, human induced changes in hydraulic conditions, forest planting on open ground, garbage and solid waste, outdoor sports and leisure activities, recreational activities, fertilisation, intensive cattle grazing, fire and fire suppression, off-road motorized driving, mining and quarrying, game or bird breeding station, fences, fencing.  These pressures relate to: waste, land take, direct land management, leisure and amenity activities, hydrological changes, forestry, pollution, agriculture and fire.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site. For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.
000199	Baldoyle Bay SAC	The known threats to this site are: bait digging or collection, walking, horse riding and non-motorised vehicles, roads, motorways, antagonism with domestic animals, non-motorized nautical sports, reclamation of land from sea, estuary or marsh, urbanised areas, human habitation, golf course, eutrophication (natural), discharges, hunting, invasive non-native species.  These pressures relate to: land take, amenity and leisure activities, built environment, human habitation, urbanisation, pollution and invasive species.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.
000202	Howth Head SAC	The known threats to this site are: abandonment of pastoral systems lack of grazing, invasive non-native species, urbanised areas, human habitation, sand and gravel quarries, walking, horse riding and non-motorised vehicles, mining and quarrying, burning down, vandalism, paths, tracks, cycling tracks.  These pressures relate to: direct land management, invasive species, urbanisation, human habitation, land extraction, amenity and leisure activities and fire.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.
000204	Lambay Island SAC	The known threats to this site are: leisure fishing, urbanised areas, human habitation, hunting, industrial or commercial areas, grazing, nautical sports, mowing or cutting of grassland.  These pressures relate to: amenity and leisure activities, human habitation, land take, built environment, agriculture and direct land management.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.
000205	Malahide Estuary SAC	The known threats to this site are: reclamation of land from sea, estuary or marsh, urbanised areas, human habitation, roads, motorways, nautical sports, golf course, fertilisation, walking, horse riding and non-motorised vehicles, hunting, motorised vehicles, invasive non-native species, bridge, viaduct.  These pressures relate to: land take, urbanisation, built environment, amenity and leisure activities, pollution, invasive species.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.
000206	North Dublin Bay SAC	The known threats to this site are: grazing, intensive maintenance of public parks or cleaning of beaches, nautical sports, leisure fishing, industrial or commercial areas, urbanised areas, human habitation, discharges, golf course, burning down, other point source pollution to surface water, antagonism with domestic animals, walking, horse riding and non-motorised vehicles, bait digging or collection, invasive non-native species, diffuse pollution to surface waters due to other sources not listed.  These pressures relate to: agriculture, amenity and leisure activities, built environment, urbanisation, human habitation, fire, pollution, land take and invasive species.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.
000208	Rogerstown Estuary SAC	The known threats to this site are: grazing, roads, motorways, walking, horse riding and non-motorised vehicles, golf course, balt digging or collection, invasive non-native species, sea defence or coast protection works, tidal barrages, reclamation of land from sea, estuary or marsh, use of biocides, hormones and chemicals, fertilisation, dispersed habitation, discharges, nautical sports, erosion.  These pressures relate to: agriculture, built environment, amenity and leisure activities, land take, invasive species, pollution and erosion.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.
000210	South Dublin Bay SAC	The known threats to this site are: non-motorized nautical sports, accumulation of organic material, nautical sports, marine water pollution, changes in abiotic conditions, discharges, roads, motorways, reclamation of land from sea, estuary or marsh, walking, horse riding and non-motorised vehicles, urbanised areas, human habitation, bait digging or collection, biocenotic evolution, succession, industrial or commercial areas, paths, tracks, cycling tracks.  These pressures relate to: amenity and leisure activities, direct land management, pollution, built environment, urbanisation, human habitation, land take.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.
000391	Ballynafagh Bog SAC	The known threats to this site are: forest planting on open ground, peat extraction, other patterns of habitation, other human intrusions and disturbances, improved access to site, fire and fire suppression.  These pressures relate to: forestry, peat extraction, human habitation and fire.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.

 <sup>&</sup>lt;sup>43</sup> For distance from Plan boundary and qualifying features for each European Site (QIs and SCIs), please refer to Error! Reference source not found.
 <sup>44</sup> Informed by, inter alia, The Status of Protected EU Habitats and Species in Ireland, Overview Volume 1 (NPWS, 2019)

Site Code	Site Name <sup>43</sup>	Characterisation of Potential Effects <sup>44</sup>
		For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.
000396	Pollardstown Fen SAC	The known threats to this site are: electricity and phone lines, grazing, disposal of household or recreational facility waste, sand and gravel extraction, leisure fishing, fire and fire suppression, hunting, sylviculture, forestry, dispersed habitation. These pressures relate to: built environment, waste, extractive industry, amenity and leisure activities, land take, fire, human habitation and forestry.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.
000397	Red Bog, Kildare SAC	The known threats to this site are: leisure fishing, sand and gravel extraction, grazing, hunting, dispersed habitation, fertilisation.  These pressures relate to: amenity and leisure activities, extractive industry, agriculture, land take, pollution, agriculture and human habitation.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.
000455	Dundalk Bay SAC	The known threats to this site are: motorized nautical sports, flooding, disposal of inert materials, pollution to surface waters (limnic & terrestrial, marine & brackish), soil pollution and solid waste (excluding discharges), disposal of household or recreational facility waste, competition (flora), biocenotic evolution, succession, garbage and solid waste, bait digging or collection, sport and leisure structures, shallow surface abrasion or mechanical damage to seabed surface, reduction or loss of specific habitat features, infilling of ditches, dykes, ponds, pools, marshes or pits, migration of species (natural newcomers), nitrogen-input, anthropogenic reduction of habitat connectivity, wildlife watching, reclamation of land from sea, estuary or marsh, illegal taking or removal of marine fauna, diffuse pollution to surface waters due to transport and infrastructure without connection to canalization or sweepers, erosion, diffuse groundwater pollution due to agricultural and forestry activities, outdoor sports and leisure activities, recreational activities, invasive non-native species, flooding modifications, sea defence or coast protection works, tidal barrages.  These pressures relate to: amenity and leisure activities, waste, flood risk management, pollution, direct land management, land take, erosion and invasive species.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.
000679	Garriskil Bog SAC	The known threats to this site are: invasive non-native species, mechanical removal of peat, other human induced changes in hydraulic conditions, non-intensive cattle grazing, burning down, problematic native species.  These pressures relate to: invasive species, peat extraction, hydrological changes, agriculture, fire and direct land management.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.
000713	Ballyman Glen SAC	The known threats to this site are: fertilisation, forest planting on open ground, disposal of household or recreational facility waste, continuous urbanisation, removal of hedges and coppice or scrub, discontinuous urbanisation, roads, motorways, sand and gravel extraction, cultivation, groundwater pollution by leakages from contaminated sites, grazing, other point source pollution to surface water.  These pressures relate to: pollution, forestry, waste, urbanisation, land take, built environment and extractive industry.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.
000714	Bray Head SAC	The known threats to this site are: burning down, urbanised areas, human habitation, motorised vehicles, species composition change (succession), paths, tracks, cycling tracks, removal of hedges and coppice or scrub, erosion, vandalism, non-intensive cattle grazing.  These pressures relate to: fire, urbanisation, human habitation, direct land management, built environment, land take, erosion and agriculture.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.
000716	Carriggower Bog SAC	The known threats to this site are: non-intensive horse grazing, species composition change (succession), dispersed habitation, rertilisation, raising the groundwater table or artificial recharge of groundwater, abandonment of pastoral systems lack of grazing, landfill, land reclamation and drying out, forest planting on open ground.  These pressures relate to: agriculture, direct land management, human habitation, pollution, alteration of groundwater table, waste and forestry.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.
000717	Deputy's Pass Nature Reserve SAC	The known threats to this site are: sylviculture, forestry, walking, horse riding and non-motorised vehicles, attraction park, invasive non-native species, disposal of household or recreational facility waste, vandalism, forest replanting (native trees), grazing, grazing in forests or woodland.  These pressures relate to: forestry, direct land management, amenity and leisure activities, built environment, invasive species, waste, forestry and agriculture.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.
000719	Glen of the Downs SAC	The known threats to this site are: walking, horse riding and non-motorised vehicles, golf course, vandalism, missing or wrongly directed conservation measures, tree surgery, felling for public safety, removal of roadside trees, invasive non-native species, grazing, burning down, attraction park, roads, motorways.  These pressures relate to: amenity and leisure activities, built environment, direct land management, land take, invasive species, agriculture and fire.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.

Site Code	Site Name <sup>43</sup>	Characterisation of Potential Effects <sup>44</sup>
000725	Knocksink Wood SAC	The known threats to this site are: disposal of household or recreational facility waste, grazing, walking, horse riding and non-motorised vehicles, interpretative centres, tree surgery, felling for public safety, removal of roadside trees, roads, motorways, removal of forest undergrowth, camping and caravans, invasive non-native species, paths, tracks, cycling tracks, missing or wrongly directed conservation measures, forest planting on open ground, vandalism, improved access to site, discontinuous urbanisation, artificial planting on open ground (non-native trees).  These pressures relate to: waste, agriculture, amenity and leisure activities, built environment, direct land management, invasive species, forestry and urbanisation.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.
000729	Buckroney- Brittas Dunes and Fen SAC	The known threats to this site are: disposal of household or recreational facility waste, non-intensive grazing, human induced changes in hydraulic conditions, removal of hedges and coppice or scrub, non-intensive mowing, fertilisation, erosion, camping and caravans, vandalism, airport, species composition change (succession), fire and fire suppression, walking, horse riding and non-motorised vehicles, golf course, invasive non-native species, trampling, overuse, discontinuous urbanisation, intensive cattle grazing, diffuse groundwater pollution due to non-sewered population, hunting, stock feeding.  These pressures relate to: waste, agriculture, land take, direct land management, amenity and leisure activities, fire, invasive species, urbanisation and pollution.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.
000733	Vale of Clara (Rathdrum Wood) SAC	The known threats to this site are: walking, horse riding and non-motorised vehicles, dispersed habitation, forest replanting (native trees), taking and removal of animals (terrestrial), collection (fungi, lichen, berries etc.), poaching, use of biocides, hormones and chemicals (forestry), damage caused by game (excess population density), invasive non-native species.  These pressures relate to: amenity and leisure activities, human habitation, forestry, land take, pollution, direct land management and invasive species.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.
000781	Slaney River Valley SAC	The known threats to this site are: fishing harbours, cultivation, pollution to surface waters (limnic & terrestrial, marine & brackish), diffuse pollution to surface waters due to household sewage and waste waters, erosion, diffuse pollution to surface waters due to agricultural and forestry activities, irrigation, predator control, human induced changes in hydraulic conditions, siltation rate changes, dumping, depositing of dredged deposits, bait digging or collection, surface water abstractions for agriculture, fertilisation, water abstractions from surface waters, bridge, viaduct, sand and gravel extraction, pollution to surface waters by industrial plants, paths, tracks, cycling tracks, storage of materials, modifying structures of inland water courses, dykes and flooding defence in inland water systems, invasive non-native species, discharges, forest and plantation management & use, bottom culture, removal of hedges and coppice or scrub.  These pressures relate to: built environment, pollution, direct land management, hydrological changes, waste, land take, water abstraction, agriculture, amenity and leisure activities, invasive species, and forestry.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.
000925	The Long Derries, Edenderry SAC	The known threats to this site are: erosion, storage of materials, abandonment of pastoral systems lack of grazing, species composition change (succession), off-road motorized driving, roads, paths and railroads.  These pressures relate to: erosion, direct land management, agriculture, amenity and leisure activities, and built environment.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.
001209	Glenasmole Valley SAC	The known threats to this site are: grazing, forest replanting (non-native trees), car parcs and parking areas, forest planting on open ground (native trees), abandonment or lack of mowing, invasive non-native species, diffuse pollution to surface waters due to household sewage and waste waters, roads, paths and railroads, forestry clearance, discontinuous urbanisation, non-intensive cattle grazing, artificial planting on open ground (non-native trees), diffuse groundwater pollution due to non-sewered population, human induced changes in hydraulic conditions, diffuse pollution to surface waters due to agricultural and forestry activities, mowing or cutting of grassland, fertilisation, non-intensive horse grazing, peat extraction, leisure fishing, non-intensive sheep grazing.  These pressures relate to: agriculture, forestry, built environment, direct land management, invasive species, pollution, forestry, urbanisation, hydrological changes, peat extraction and amenity and leisure activities.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.
001387	Ballynafagh Lake SAC	The known threats to this site are: grazing, leisure fishing.  These pressures relate to: agriculture, direct land management and amenity and leisure activities.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.
001398	Rye Water Valley/Carton SAC	The known threats to this site are: continuous urbanisation, fertilisation, roads, motorways, dispersed habitation, sylviculture, forestry, grazing, removal of hedges and coppice or scrub, modifying structures of inland water courses.  These pressures relate to: urbanisation, polluti9on, built environment, forestry, land take, modification of water courses.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.
001742	Kilpatrick Sandhills SAC	The known threats to this site are: problematic native species, burning down, disposal of household or recreational facility waste, off-road motorized driving, sea defence or coast protection works, tidal barrages, species composition change (succession), outdoor sports and leisure activities, recreational activities, erosion.  These pressures relate to: direct land management, waste, amenity and leisure activities, built environment and erosion.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.

Site Code	Site Name <sup>43</sup>	Characterisation of Potential Effects <sup>44</sup>
001757	Holdenstown Bog SAC	The known threats to this site are: human induced changes in hydraulic conditions, infilling of ditches, dykes, ponds, pools, marshes or pits, cultivation, forest planting on open ground, suspended electricity and phone lines, grazing.  These pressures relate to: hydrological changes, land take, forestry, built environment and grazing.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.
001766	Magherabeg Dunes SAC	For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.  The known threats to this site are: non-intensive grazing, missing or wrongly directed conservation measures, vandalism, diffuse pollution to surface waters via storm overflows or urban run-off, pollution to surface waters by industrial plants, walking, horse riding and non-motorised vehicles, abandonment of pastoral systems lack of grazing, species composition change (succession), erosion.  These pressures relate to: agriculture, direct land management, pollution, flood risk management, amenity and leisure activities, erosion.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.
001810	White Lough, Ben Loughs and Lough Doo SAC	For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.  The known threats to this site are: outdoor sports and leisure activities, recreational activities, abandonment of pastoral systems lack of grazing, disposal of inert materials, fertilisation, agriculture activities not referred to above, trapping, poisoning, landfill, land reclamation and drying out.  These pressures relate to: amenity and leisure activities, direct land management, waste, pollution, agriculture and land take.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.
001957	Boyne Coast and Estuary SAC	The known threats to this site are: infilling of ditches, dykes, ponds, pools, marshes or pits, urbanised areas, human habitation, sea defence or coast protection works, tidal barrages, pollution to surface waters (limnic & terrestrial, marine & brackish), walking, horse riding and non-motorised vehicles, disposal of inert materials, vandalism, dykes, embankments, artificial beaches, general, storm, cyclone, off-road motorized driving, human induced changes in hydraulic conditions, paths, tracks, cycling tracks, biocenotic evolution, succession, other human intrusions and disturbances, bridge, viaduct, disposal of household or recreational facility waste, reduction, lack or prevention of erosion, interpretative centres, removal of sediments (mud), storage of materials, invasive non-native species.  These pressures relate to: direct land management, urbanisation, human habitation, built environment, pollution, amenity and leisure activities, waste, hydrological changes and invasive species.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.
002120	Lough Bane and Lough Glass SAC	The known threats to this site are: surface water abstractions for public water supply, Removal of hedges and coppice or scrub.  These pressures relate to: water abstraction, land take and direct land management.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.
002122	Wicklow Mountains SAC	The known threats to this site are: non- intensive timber production (leaving dead wood or old trees untouched), tree surgery, felling for public safety, removal of roadside trees, military manoeuvres, taking from nest (e.g. falcons), grazing in forests or woodland, hunting and collection of wild animals (terrestrial), burning down, paths, tracks, cycling tracks, peat extraction, off-road motorized driving, collection (fungi, lichen, berries etc.), vandalism, outdoor sports and leisure activities, ercreational activities, grazing, collapse of terrain, landslide, mountaineering, rock climbing, speleology, fences, fencing, wildlife watching, urbanised areas, human habitation, damage by herbivores (including game species), trampling, overuse, disposal of household or recreational facility waste, missing or wrongly directed conservation measures, invasive non-native species, walking, horse riding and non-motorised vehicles, erosion, stock feeding.  These pressures relate to: direct land management, forestry, military activities, land take, agriculture, fire, peat extraction, amenity and leisure activities, urbanisation, human habitation, waste, invasive species.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.
002162	River Barrow and River Nore SAC	The known threats to this site are: peat extraction, forestry activities not referred to above, intensive fish farming, intensification, pollution to surface waters (limnic & terrestrial, marine & brackish), forest replanting (native trees), port areas, dredging or removal of limnic sediments, removal of hedges and coppice or scrub, water abstractions from surface waters, intensive cattle grazing, sand and gravel quarries, reduction in migration or migration barriers, use of fertilizers (forestry), leisure fishing, industrial or commercial areas, dykes and flooding defence in inland water systems, agricultural intensification, netting, human induced changes in hydraulic conditions, erosion, modifying structures of inland water courses, invasive non-native species, changes in abiotic conditions, forest and plantation management & use, fishing and harvesting aquatic resources.  These pressures relate to: peat extraction, forestry, aquaculture, agriculture, pollution, forestry, built environment, land take, water abstraction, extractive industry, hydrological changes, erosion, direct land management, and invasive species. All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.
002193	Ireland's Eye SAC	The known threats to this site are: fire and fire suppression, nautical sports, wildlife watching, walking, horse riding and non-motorised vehicles, abandonment of pastoral systems lack of grazing, trampling, overuse.  These pressures relate to: fire, amenity and leisure activities, direct land management and agriculture.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.
002201	Derragh Bog SAC	The known threats to this site are: problematic native species, invasive non-native species, forestry clearance, other human induced changes in hydraulic conditions, burning down.  These pressures relate to: direct land management, invasive species, forestry, invasive species and fire.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.

Site Code	Site Name <sup>43</sup>	Characterisation of Potential Effects <sup>44</sup>		
002203	Girley (Drewstown) Bog SAC	The known threats to this site are: invasive non-native species, other human induced changes in hydraulic conditions, problematic native species, burning down, landfill, land reclamation and drying out, forestry clearance.  These pressures relate to: invasive species, hydrological changes, direct land management, fire and forestry.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.		
002249	The Murrough Wetlands SAC	The known threats to this site are: paths, tracks, cycling tracks, fertilisation, modification of water flow (tidal & marine currents), grazing, sylviculture, forestry, walking, horse riding and non-motorised vehicles, railway lines, TGV, sand and gravel extraction, sea defence or coast protection works, tidal barrages, crossion, disposal of industrial waste.  These pressures relate to: built environment, amenity and leisure activities, pollution, agriculture, hydrological changes, direct land management, erosion, waste, extractive industry.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.		
002299	River Boyne and River Blackwater SAC	The known threats to this site are: cultivation, storage of materials, other human induced changes in hydraulic conditions, other human intrusions and disturbances, industrial or commercial areas, mowing or cutting of grassland, bridge, viaduct, disposal of industrial waste, outdoor sports and leisure activities, recreational activities, roads, motorways, management of aquatic and bank vegetation for drainage purposes, modifying structures of inland water courses, other discharges, removal of hedges and coppice or scrub, human induced changes in hydraulic conditions, use of biocides, hormones and chemicals, invasive non-native species, pollution to surface waters (limnic & terrestrial, marine & brackish), ferfilisation, stock feeding, other patterns of habitation, tree surgery, felling for public safety, removal of roadside trees, siltation rate changes, dumping, depositing of dredged deposits, artificial planting on open ground (non-native trees), sand and gravel extraction, other sport or leisure complexes.  These pressures relate to: agriculture, direct land management, hydrological changes, built environment, waste, amenity and leisure activities, land take, pollution, invasive species, forestry, extractive industry.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, rallways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.		
002331	Mouds Bog SAC	The known threats to this site are: cultivation, grazing, industrial or commercial areas, fire and fire suppression, mechanical removal of peat, sylviculture, forestry, invasive non-native species.  These pressures relate to: agriculture, built environment, fire, forestry, invasive species, peat extraction and invasive species.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.		
002340	Moneybeg and Clareisland Bogs SAC	The known threats to this site are: other sport or leisure complexes, forestry clearance, other human induced changes in hydraulic conditions, invasive non-native species, burning down, hunting, disposal of household or recreational facility waste, mechanical removal of peat.  These pressures relate to: amenity and leisure activities, built environment, hydrological changes, invasive species, waste, fire and peat extraction.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.		
002342	Mount Hevey Bog SAC	The known threats to this site are: canalisation & water deviation, modification of hydrographic functioning, parasitism (flora), disposal of household or recreational facility waste, introduced genetic material, GMO, railway lines, TGV, forestry clearance, invasive non-native species, mechanical removal of peat, landfill, land reclamation and drying out, paths, tracks, cycling tracks.  These pressures relate to: direct land management, hydrological changes, waste, GMO, built environment, forestry, invasive species and peat extraction.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.		
003000	Rockabill to Dalkey Island SAC	The known threats to this site are: discharges, utility and service lines, siltation rate changes, dumping, depositing of dredged deposits, professional active fishing, removal of sediments (mud), shipping lanes, noise nuisance, noise pollution.  These pressures relate to: built environment, waste, aquaculture, direct management, shipping and noise.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.		
004006	North Bull Island SPA	The known threats to this site are: other patterns of habitation, roads, motorways, walking, horse riding and non-motorised vehicles, interpretative centres, bait digging or collection, golf course, industrial or commercial areas, shipping lanes, continuous urbanisation, discharges, bridge, viaduct, nautical sports.  These pressures relate to: human habitation, amenity and leisure activities, built environment, land take, shipping, urbanisation.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.		
004014	Rockabill SPA	The known threats to this site are: nautical sports, other forms of transportation and communication.  These pressures relate to: amenity and leisure activities and built environment.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.		
004015	Rogerstown Estuary SPA	The known threats to this site are: landfill, land reclamation and drying out, hunting, fertilisation, disposal of household or recreational facility waste, disposal of industrial waste, grazing, dispersed habitation, invasive non-native species, nautical sports, golf course, bait digging or collection.  These pressures relate to: land take, direct land management, pollution, agriculture, waste, human habitation, and invasive species.		

T				
Site Code	Site Name <sup>43</sup>	Characterisation of Potential Effects <sup>44</sup>		
		The DART+ programme (Coastal North; Electrification and re-signalling from Malahide to Drogheda) that includes for electrification of the line could introduce a collision risk to birds using the estuary. Plans for a cycle way as provided by the GDA Cycle Network Plan could impact on site. These two developments could lead to cumulative impacts on the site if unmitigated.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.		
004016	Baldoyle Bay	The known threats to this site are: roads, motorways, golf course, urbanised areas, human habitation, eutrophication (natural), fertilisation, walking, horse riding and non-motorised vehicles, bait digging or collection, hunting, reclamation of		
	SPA	land from sea, estuary or marsh, invasive non-native species.  These pressures relate to: built environment, amenity and leisure activities, human habitation, pollution, agriculture, invasive species and land take.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.		
004024	South Dublin Bay and Tolka Estuary SPA	The known threats to this site are: urbanised areas, human habitation, discharges, industrial or commercial areas, leisure fishing, nautical sports, roads, motorways, eutrophication (natural), walking, horse riding and non-motorised vehicles, bait digging or collection, reclamation of land from sea, estuary or marsh.  These pressures relate to: urbanisation, human habitation, built environment, amenity and leisure activities, pollution and land take.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.		
004025	Broadmeadow/ Swords Estuary SPA	For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.  The known threats to this site are: railway lines, industrial or commercial areas, bridge, viaduct, invasive non-native species, paths, tracks, cycling tracks, nautical sports, walking, horse riding and non-motorised vehicles, urbanised areas, human habitation, reclamation of land from sea, estuary or marsh, fertilisation.  These pressures relate to: built environment, invasive species, amenity and leisure activities, urbanisation, human habitation and land take.  The DART+ programme (Coastal North; Electrification and re-signalling from Malahide to Drogheda) that includes for electrification of the line could introduce a collision risk to birds using the estuary. Plans for a cycle way as provided by the GDA Cycle Network Plan could impact on site. These two developments could lead to cumulative impacts on the site if unmitigated.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.		
004026	Dundalk Bay SPA	The known threats to this site are: industrial or commercial areas, grazing, shipping lanes, dispersed habitation, discharges, walking, horse riding and non-motorised vehicles, invasive non-native species, leisure fishing, nautical sports, urbanise areas, human habitation, dykes, embankments, artificial beaches, roads, motorways, fertilisation, siltation rate changes, dumping, depositing of dredged deposits.  These pressures relate to: built environment, shipping, human habitation, amenity and leisure activities, urbanisation, pollution and waste.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.		
004040	Wicklow Mountains SPA	The known threats to this site are: sylviculture, forestry, grazing, peat extraction, walking, horse riding and non-motorised vehicles, interpretative centres, paths, tracks, cycling tracks.  These pressures relate to: direct land management, forestry, agriculture, peat extraction, amenity and leisure activities and built environment.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.		
004043	Lough Derravaragh SPA	The known threats to this site are: hunting, sylviculture, forestry, fertilisation, leisure fishing, animal breeding.  These pressures relate to: land take, direct land management, pollution and amenity and leisure activities.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.		
004061	Lough Kinale and Derragh Lough SPA	The known threats to this site are: leisure fishing, hunting, animal breeding, sylviculture, forestry, fertilisation.  These pressures relate to: amenity and leisure activities, land take, forestry, pollution and agriculture.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.		
004063	Poulaphouca Reservoir SPA	The known threats to this site are: leisure fishing, nautical sports, forest planting on open ground, hunting, bridge, viaduct.  These pressures relate to: amenity and leisure activities, forestry, land take and built environment, All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.		
004065	Lough Sheelin SPA	The known threats to this site are: sylviculture, forestry, leisure fishing, animal breeding, fertilisation.  These pressures relate to: direct land management, forestry, amenity and leisure activities, pollution and agriculture.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.		

Site Code	Site Name <sup>43</sup>	Characterisation of Potential Effects <sup>44</sup>		
004069				
004089	Lambay Island SPA Boyne Estuary	The known threats to this site are: dispersed habitation, hunting, nautical sports, mowing or cutting of grassland, grazing, shipping lanes.  These pressures relate to: human habitation, amenity and leisure activities, land take, direct land management and shipping.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.  The known threats to this site are: leisure fishing, marine and freshwater aquaculture, qolf course, siltation rate changes, dumping, depositing of dredged deposits, invasive non-native species, walking, horse riding and non-motorised vehicles,		
	SPÁ	modification of hydrographic functioning, reclamation of land from sea, estuary or marsh, urbanised areas, human habitation.  These pressures relate to: amenity and leisure activities, aquaculture, built environment, hydrological changes, waste, invasive species, land take, urbanisation and human habitation.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.		
004102	Garriskil Bog SPA	The known threats to this site are: railway lines, TGV, grazing, modifying structures of inland water courses, fire and fire suppression, restructuring agricultural land holding, forest planting on open ground.  These pressures relate to: built environment, agriculture, modification of water courses, fire, agriculture and forestry.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.		
004113	Howth Head Coast SPA	The known threats to this site are: fire and fire suppression, walking, horse riding and non-motorised vehicles.  These pressures relate to: fire, amenity and leisure activities and direct land management.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.		
004117	Ireland's Eye SPA	The known threats to this site are: leisure fishing, walking, horse riding and non-motorised vehicles.  These pressures relate to: amenity and leisure activities and direct land management.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.		
004122	Skerries Islands SPA	The known threats to this site are: walking, horse riding and non-motorised vehicles.  These pressures relate to: amenity and leisure activities and direct land management.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.		
004127	Wicklow Head SPA	The known threats to this site are: walking, horse riding and non-motorised vehicles.  These pressures relate to: amenity and leisure activities and direct land management.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site. For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.		
004158	River Nanny Estuary and Shore SPA	The known threats to this site are: continuous urbanisation, walking, horse riding and non-motorised vehicles.  These pressures relate to: amenity and leisure activities and direct land management.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.		
004172	Dalkey Islands SPA	The known threats to this site are: walking, horse riding and non-motorised vehicles, urbanised areas, human habitation, nautical sports, grazing.  These pressures relate to: amenity and leisure activities, direct land management, and agriculture.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.		
004186	The Murrough SPA	The known threats to this site are: railway lines, TGV, fertilisation, walking, horse riding and non-motorised vehicles.  These pressures relate to: amenity and leisure activities, agriculture, pollution and direct land management.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments and Environmental Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.		
004232	River Boyne and River Blackwater SPA	The known threats to this site are: dispersed habitation, human induced changes in hydraulic conditions, roads, motorways, urbanised areas, human habitation.  These pressures relate to: human habitation, urbanisation, hydrological changes, and built environment.  All projects resulting from the Strategy will undergo full Appropriate Assessment - and Ecological Impact Assessments as required as the project level. In addition to this stipulation, there are several mitigation measures built into the Strategy (see table 5.1 for full list of mitigation measures) which address the only aspects of the landscape which the Strategy may propose to alter; i.e., the road networks, cycle ways, walkways, railways, or their usage. Thus, the Strategy does not introduce sources for effect to this European Site.  For further details in relation to mitigation measures / development objectives incorporated into the Strategy please refer to Section 5 below.		

# **Section 5** Mitigation Measures

This section outlines measures that have been incorporated into the Draft Strategy in order to mitigate against potential effects to European sites as identified above. The Draft Strategy was prepared in an iterative manner whereby the Strategy and SEA/AA documents have informed subsequent versions of the other. These mitigation measures ensure that there will be no significant effects to the ecological integrity of any European site from implementation of the Draft Strategy.

The SEA and AA processes that have been undertaken alongside the preparation of the Strategy have brought about changes to the emerging Strategy thereby enabling the mitigation of any potentially adverse environmental effects. All recommendations made by the SEA and AA processes are identified on Table 5.1 and Table 9.2 below and have been integrated into the Strategy.

These tables also link the various mitigation measures to specific environmental components and the potential adverse effects that would be present if the changes were not made. The measures generally benefit multiple environmental components i.e. a measure providing for the protection of biodiversity, flora and fauna could beneficially impact upon the minimisation of flood risk and the protection of human health, for example.

# Appropriate Assessment of the Draft Transport Strategy for the Greater Dublin Area 2022-2042 Table 5.1 SEA/AA recommendations included within the Strategy that will contribute towards the protection of European sites

Strategy Section No.	SEA/AA Recommended Text
7.4.1 Environmental Assessment	The alignments and details of proposed transport projects set out in the Transport Strategy, unless already provided for by plans or proposals that have been subject to environmental assessment, are indicative only and are subject to further development as the design and planning processes for individual projects progress. New projects will be required to be subject to lower-tier environmental assessment and detailed corridor and route selection processes as relevant (including those arising from SEA recommendation "Corridor and Route Selection Process" integrated into Chapter 18.
16. Climate Action Management	Climate 1  Additional demand management measures to achieve the GDA transport emissions target for 2030 will be implemented. The NTA will undertake a detailed assessment to establish the optimal framework of demand management measures, which is likely to include parking restraint, zonal charging, additional tolling / road pricing and/or further vehicle electrification.
	Climate 2 Through the implementation of the full measures set out in this strategy, in combination with the plans and programmes of Government, the NTA will contribute to a reduction in CO2 emissions from transport in the GDA to below 1 MtCO <sub>2</sub> eg by 2042.
18. Environmental	Introduction
Protection and Management	Strategic Environmental Assessment (SEA) and Appropriate Assessment (AA) have both been undertaken alongside the preparation of the Strategy. All recommendations arising from the SEA and AA processes have been integrated into the Strategy. Many of these recommendations have been set out in the SEA Environmental Report; however, some of the more strategic recommendations are detailed below. Compliance with these measures will facilitate environmental protection and management.
18. Environmental	Regulatory Framework for Environmental Protection and Management
Protection and Management	In implementing this Strategy, the Authority will cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management and will ensure that plans, programmes and projects comply with EU Directives – including the Habitats Directive (92/43/EC), the Birds Directive (2009/147/EC), the Environmental Impact Assessment Directive (2011/92/EU, as amended by 2014/52/EC) and the Strategic Environmental Assessment Directive (2001/42/EC) – and relevant transposing Regulations.
<ol><li>18. Environmental</li></ol>	Lower-level Decision Making
Protection and	Lower levels of decision making and environmental assessment should consider the environmental sensitivities identified in Section 4 of the SEA Environmental Report, including the following:
Management	<ul> <li>Special Areas of Conservation and Special Protection Areas;</li> </ul>
	<ul> <li>Features of the landscape that provide linkages/connectivity to designated sites (e.g. watercourses and areas of semi-natural habitat, such as linear woodlands);</li> </ul>
	Salmonid Waters;
	Shellfish Waters;
	Freshwater Pearl Mussel catchments;
	Nature Reserves;  Nature Reserves;
	<ul> <li>Natural Heritage Areas and proposed Natural Heritage Areas;</li> <li>Areas likely to contain a habitat listed in Annex 1 of the Habitats Directive;</li> </ul>
	<ul> <li>Areas likely to contain a habitat listed in Africa: For the Habitats Directive;</li> <li>Entries to the Record of Monuments and Places and Zones of Archaeological Potential;</li> </ul>
	<ul> <li>Entries to the Record of Protected Structures;</li> </ul>
	<ul> <li>Un-designated sites of importance to wintering or breeding bird species of conservation concern;</li> </ul>
	Architectural Conservation Areas; and
	Relevant landscape designations.
18. Environmental	Corridor and Route Selection Process
Protection and	The following Corridor and Route Selection Process will be undertaken for relevant new infrastructure:
Management	Stage 1 - Route Corridor Identification, Evaluation and Selection
ŭ	• Environmental constraints (including those identified in Section 4 of the SEA Environmental Report) and opportunities (such as existing linear infrastructure) will assist in the identification of possible
	route corridor options;  • Potentially feasible corridors within which infrastructure could be accommodated will be identified and these corridors assessed. The selection of the preferred route corridor will avoid constraints and
	meet opportunities to the optimum extent, as advised by relevant specialists; and
	<ul> <li>In addition to the constraints identified above, site-specific field data may be required to identify the most appropriate corridors.</li> </ul>
	Stage 2 – Route Identification, Evaluation and Selection
	Potentially feasible routes within the preferred corridor will be identified and assessed. The selection of preferred routes will avoid constraints and meet opportunities to the optimum extent, as advised.
	by relevant specialists, taking into account project level information and potential mitigation measures that are readily achievable;
	<ul> <li>In addition to the constraints identified above, site-specific field data may be required to identify the most appropriate routes; and</li> </ul>
	<ul> <li>In addition to environmental considerations, the identification of route corridors and the refinement of the route lines is likely to be informed by other considerations.</li> </ul>
18. Environmental	Appropriate Assessment
Protection and	All projects and plans arising from this Strategy will be screened for the need to undertake Appropriate Assessment under Article 6 of the Habitats Directive. A plan or project will only be authorised after the
Management	competent authority has ascertained, based on scientific evidence, Screening for Appropriate Assessment, and subsequent Appropriate Assessment where necessary, that:
	• The Plan or project will not give rise to adverse direct, indirect or secondary effects on the integrity of any European site (either individually or in combination with other plans or projects); or
	• The Plan or project will have significant adverse effects on the integrity of any European site (that does not host a priority natural habitat type/and or a priority species) but there are no alternative
	solutions and the plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature. In this case, it will be a requirement
	to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of Natura 2000; or
	The Plan or project will have a significant adverse effect on the integrity of any European site (that hosts a natural habitat type and/or a priority species) but there are no alternative solutions and the
	plan or project must nevertheless be carried out for imperative reasons for overriding public interest, restricted to reasons of human health or public safety, to beneficial consequences of primary

Strategy Section No.	SEA/AA Recommended Text
	importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of Natura 2000.
18. Environmental	Protection of Natura 2000 Sites
Protection and	No plans or projects giving rise to adverse effects on the integrity of European sites (cumulatively, directly or indirectly) arising from their size or scale, land take, proximity, resource requirements, emissions
Management	(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 Strategy (either individually or
	in combination with other plans or projects) <sup>45</sup> .
18. Environmental	Climate Change, Emissions and Energy
Protection and	As identified in the SEA Environmental Report that accompanies this Strategy, the Strategy facilitates sustainable mobility and associated positive effects, including those relating to:
Management	<ul> <li>Reductions in greenhouse gas emissions and associated achievement of legally binding targets;</li> </ul>
	<ul> <li>Reductions in emissions to air and associated achievement of air quality objectives, thereby contributing towards improvement or air quality and protection of human health;</li> </ul>
	<ul> <li>Reductions in consumption of non-renewable energy sources and achievement of legally binding renewable energy targets; and</li> </ul>
	Energy security.
	In implementing the Strategy, the Authority will support relevant provisions contained in the National Energy and Climate Plan, the Climate Adaptation Strategies of planning authorities within the Greeter Dublin Area, the Climate Action Plan (2019), National Climate Change Adaptation Framework (2018), the National Mitigation Plan (2017) and the Department of Transport's Sectoral Adaptation Plan for Transport Infrastructure, which builds on the 2017 "Adaptation Planning – Developing Resilience to Climate Change in the Irish Transport Sector".
	Cognisant of the imperative to reduce emissions, the Authority will seek to ensure primacy for transport options that provide for unit reductions in carbon emissions. This can most effectively be done by promoting public transport, walking and cycling, and by actively seeking to reduce car use in circumstances where alternative options are available.
	During the preparation and/or review of policies and plans relating to climate charge, carbon emissions and energy usage, the Authority will seek to integrate Strategy objectives, as appropriate.
18. Environmental	Other SEA/AA Recommendations
Protection and	In implementing the Strategy, the Authority will ensure that the measures included in Table 9.2 of the SEA Environmental Report are complied with.
Management	

<sup>45</sup> Except as provided for in Article 6(4) of the Habitats Directive, viz. There must be: a) no alternative solution available; b) imperative reasons of overriding public interest for the project to proceed; and c) Adequate compensatory measures in place.

The SEA and AA recommendations detailed in Table 5.2 below will be integrated into the Strategy through the commitment described in Table 9.1 above entitled "Other SEA Recommendations". These measures are linked to specific environmental components and the potential adverse effects that would be present if the measures were not integrated into the Strategy.

Table 5.2 Provisions referred to in the Strategy under "Other SEA/AA Recommendations" that will contribute towards the protection of European sites

Environmental	Potential adverse	Requirement
component effect mitigated		
benefitting		
Various	Various – see below	Construction and Environmental Management Plans Construction Environment Management Plans (CEMPs) shall be prepared in advance of the construction of relevant projects and implemented throughout. Such plans shall incorporate
		relevant mitigation measures which have been integrated into the Strategy and any lower tier Environmental Impact Statement or Appropriate Assessment. CEMPs typically provide details
		of intended construction practice for the proposed development, including:
		a. location of the sites and materials compound(s) including area(s) identified for the storage of construction refuse,
		b. location of areas for construction site offices and staff facilities,
		c. details of site security fencing and hoardings,
		d. details of on-site car parking facilities for site workers during the course of construction, e. details of the timing and routing of construction traffic to and from the construction site and associated directional signage,
		f. measures to obviate queuing of construction traffic on the adjoining road network,
		g. measures to prevent the spillage or deposit of clay, rubble or other debris,
		h. alternative arrangements to be put in place for pedestrians and vehicles in the case of the closure of any public right of way during the course of site development works,
		i. details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels,
		j. containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained; such bunds shall be roofed to exclude rainwater,
		k. disposal of construction/demolition waste and details of how it is proposed to manage excavated soil,
		I. a water and sediment management plan, providing for means to ensure that surface water runoff is controlled such that no silt or other pollutants enter local water courses or drains,
		m. details of a water quality monitoring and sampling plan.
		n. if peat is encountered - a peat storage, handling and reinstatement management plan.
		o. measures adopted during construction to prevent the spread of invasive species (such as Japanese Knotweed).
		p. appointment of an ecological clerk of works at site investigation, preparation and construction phases.
		q. details of appropriate mitigation measures for lighting specifically designed to minimise impacts to biodiversity and ecological functioning.
Various Various – see below Maintenance Plan		
		Lower tier assessments should examine the need for Maintenance Plans informed by environmental considerations to be prepared and implemented.
Air and Climatic Factors	Emissions to air and associated issues	Please refer to the overall approach and detail provided for by the Strategy, which focusses significant levels of investment in sustainable transport modes and addresses Climate Action Management at Chapter 16.
ractors	associated issues	Air and Energy
		Contribute towards: compliance with air quality legislation; greenhouse gas emission targets; management of noise levels, including taking into account available noise maps and Noise
		Action Plans for the Dublin Agglomeration and surrounding parts of the Strategy area (including provisions relating to the preservation of Quiet Areas); and reductions in energy usage.
		Climate Adaptation and Resilience
		Improve resilience and adaptation to climate change by taking into account issues including the following in the siting and deign of projects:
		Extreme precipitation and risk of high river flows and associated implications including those relating to pluvial and fluvial flooding, bridge scour, soil erosion and landslides;
		Sea level rise and storm surge and associated implications including those relating to coastal erosion and coastal flooding; and
		Extreme temperatures and associated implications including those relating to the operation of transport and ancillary infrastructure and services.
Population and	Potential interactions if	Human Health
human health	effects upon	Assess proposals for development in terms of, inter alia, potential impact on existing adjacent developments, existing land uses and/or the surrounding landscape. Where proposed
	environmental vectors	developments would be likely to have a significant adverse effect on the amenities of the area through pollution by noise, fumes, odours, dust, grit or vibration, or cause pollution of air,
	such as air are not	water and/or soil, mitigation measures shall be introduced in order to eliminate adverse environmental impacts or reduce them to an acceptable operating level.
	mitigated	Green/Blueways and Existing Green Infrastructure
		Proposals for greenway/blueway development should contribute towards the protection or enhancement of existing green infrastructure and have regard to the EPA and HSE research
		and associated toolkits into the benefits of blue and green spaces.

Environmental component benefitting	Potential adverse effect mitigated	se Requirement		
Biodiversity and flora and fauna	- Arising from both construction and operation of transport infrastructure and services and associated facilities/ infrastructure: loss of/damage to biodiversity in designated sites, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna Habitat loss, fragmentation and deterioration, including patch size and edge effects Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species and/or coastal squeeze Effects in riparian zones where new crossings of waters, if any, are progressed Potential effects on vegetation from transport emissions.	Protection of Biodiversity including Natura 2000 Network Contribute, as appropriate, twents the protection of designated ecological sites including Special Areas of Conservation (SACs) and Special Protection Areas (SPAs); UNESCO World Heritage and UNESCO Biosphere sites; Ramars Sites: Salmonial Waters; Shellfish Waters; Freshwater Pearl Mussel actachments; Florar Protection Crider sites and species; Wildlife sites (including Nature Reserves): the Water Framework Directive Register of Protective Areas; Natural Herriage Areas (NAHA) and proposed Natural Heritage Areas (NAHA) and the Environmental Linguistic (NAHA) and proposed Natural Heritage (NAHA) and proposed Natural Heritage (NAHA) and proposed Natural Heritage (Environmental Assessment Directive (2000/474/EC)).  National legislation, including the Wildfield Acts 1976 and 2010 (as amended), the European Communities (Birds and Natural Hebitats) Regulations (2014 (as amended), the European Communities (Birds and Natural Hebitats) Regulations (2014) (as amended), the European Communities (Birds and Natural Hebitats) Regulations (2014) (as amended), the European Communities (Birds and Natural Hebitats) Regulations (2014) (as amended), the European Communities (Birds and Natural Hebitats) Regulations (2014) (as amended), the European Communities (Birds and Natural Hebitats) Regulations (2014) (as amended), the European Communities (Birds and Natural Hebitats) Regulations (2014) (as amended), the European Communitie		

<sup>46</sup> Including Annex I habitats, Annex II species and their habitats and Annex IV species and their breeding sites and resting places (wherever they occur).

<sup>&</sup>lt;sup>47</sup> Including Annex I species and other regularly occurring migratory species, and their habitats (wherever they occur).

<sup>&</sup>lt;sup>48</sup> Including protected species and natural habitats.

<sup>&</sup>lt;sup>49</sup> Including protected species and natural habitats.

<sup>50</sup> Including with regard to water quality, surface water hydrology, fish spawning and nursery areas, passage of migratory fish, ecosystem structure and functioning and sport and commercial fishing and angling resources.

Environmental component	Potential adverse effect mitigated	Requirement
benefitting		
		Lighting Sensitive Species Lighting fixtures should provide only the amount of light necessary for personal safety and should be designed so as to avoid creating glare or emitting light above a horizontal plane. Lighting fixtures should have minimum environmental impact, thereby contributing towards the protection of amenity and the protection of light sensitive species such as bats.
		Non-native invasive species  Support, as appropriate, the National Parks and Wildlife Service's efforts to seek to control and manage the spread of non-native invasive species on land and water. Where the presence of non-native invasive species is identified at the site of any proposed development or where the proposed activity has an elevated risk of resulting in the presence of these species, details of how these species will be managed and controlled will be required.
		National Peatlands Strategy Support, as appropriate, any relevant recommendations contained in the National Peatlands Strategy 2015.
Material Assets	- Generation of	Also see Construction and Environmental Management Plans provision above
	construction waste - Loss or damage to built/amenity assets and infrastructure including as a result of new or	Construction Waste  Demonstrate that all waste arising during construction phase will be managed and disposed of in a way that ensures the provisions of the Waste Management Acts and regulations and any of the relevant Local Authorities Waste Management Plans. Construction Waste Management Plans will be implemented to minimise waste and ensure correct handling and disposal of construction waste streams in accordance with the Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects, Department of the Environment, July 2006.
	widened transport	Waste Creation
	infrastructure	Support the minimisation of waste creation and promote a practice of reduce, reuse and recycle where possible.
		Waste Disposal
		Safeguard the environment by seeking to ensure that residual waste is disposed of appropriately.
		Public Assets and Infrastructure  Contribute towards the protection of public assets and infrastructure including resources such as: public open spaces, parks and recreational areas; public buildings and services; and utility infrastructure (electricity, gas, telecommunications, water supply, wastewater infrastructure etc.)
Water	- Adverse impacts upon	Also see Construction and Environmental Management Plans provision above and measures under soil above and material assets below
	the status of water bodies and entries to the WFD Register of Protected Areas, arising from changes in quality, flow and/or morphology - Increase in the risk of	Water Framework Directive and associated legislation Contribute towards, as appropriate, the protection of existing and potential water resources, and their use by humans and wildlife, including rivers, streams, wetlands, groundwater, coastal waters and associated habitats and species in accordance with the requirements and guidance in the EU Water Framework Directive 2000 (2000/60/EC), the European Union (Water Policy) Regulations 2003 (as amended), the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (SI No. 272 of 2009), the Groundwater Directive 2006/118/EC and the European Communities Environmental Objectives (groundwater) Regulations, 2010 (S.I. No. 9 of 2010) and other relevant EU Directives, including associated national legislation and policy guidance (including any superseding versions of same). To support the application and implementation of a catchment planning and management approach to development and conservation, including the implementation of Sustainable Drainage System techniques for new development.
	flooding	River Basin Management Plan Support the implementation of the relevant recommendations and measures as outlined in the most up to date River Basin Management Plan, and associated Programme of Measures. Proposed plans, programmes and projects shall not have an unacceptable impact on the water environment, including surface waters, groundwater quality and quantity, river corridors and associated woodlands. Also to have cognisance of, where relevant, the EU's Common Implementation Strategy Guidance Document No. 20 and 36 which provide guidance on exemptions to the environmental objectives of the Water Framework Directive.  Bathing Water
		Contribute towards the achievement of the requirements of the EU Bathing Water Directive and transposing Bathing Water Quality Regulations (SI No. 79 of 2008) and EU Mandatory Values, as a minimum, and EU Guide Values, where possible.
		Flood Risk Management Guidelines  Comply with the Planning System and Flood Risk Management Guidelines (2009, DEHLG/OPW) (including any clarifying Circulars or superseding versions of same) and relevant outputs of the Catchment and Flood Risk Assessment and Management Studies.
		Surface Water Drainage and Sustainable Drainage Systems (SuDs)
		Ensure that new development is adequately serviced with surface water drainage infrastructure and promote the use of Sustainable Drainage Systems as appropriate.
Landscape	Occurrence of adverse visual impacts and conflicts with the appropriate protection	Landscape Designations  Contribute, as appropriate, towards the protection of county and local level landscape designations from incompatible developments. Proposals for development that have the potential to significantly adversely impact upon these designations shall be accompanied by an assessment of the potential landscape and visual impacts of the proposed development - demonstrating that landscape impacts have been anticipated and avoided to a level consistent with the sensitivity of the landscape and the nature of the designation.
	of statutory designations relating to	Amenity Contribute towards the protection of areas of amenity value and minimise losses, as a result of the development of new or widened infrastructure.
	the landscape	Coastal Areas and Seascapes
		Contribute towards the protection of landscape character and the visual potential of the coast and conserve the character and quality of seascapes.
		National Landscape Strategy Support, as appropriate, any relevant recommendations contained in the National Landscape Strategy for Ireland 2015-2025.

Environmental	Potential adverse	Appropriate Assessment of the Draft Transport Strategy for the Greater Dublin Area 2022-2042  Requirement
component	effect mitigated	Requirement
benefitting	enectimingated	
	Data atial affacts as	Analysis at the transfer of th
Cultural Heritage	Potential effects on	Archaeological Heritage
	protected and unknown	Contribute, as appropriate, towards the protection and sympathetic enhancement of archaeological heritage, in particular by implementing the relevant provisions of the Planning and
	archaeology and	Development Act 2000 (as amended) and the National Monuments Act, 1930 (as amended).
	protected architecture	
	arising from	Any alterations to archaeological heritage or its context, including that which may arise as a result of the development of new or widened infrastructure, shall be in compliance with
	construction and	relevant legislation.
	operation activities,	Protection of Archaeological Sites
	including as a result of	Contribute, as appropriate, towards the protection of archaeological sites and monuments and their settings, archaeological objects and underwater archaeological sites that are listed in
	increasing traffic flows.	the Record of Monuments and Places, in the ownership/guardianship of the State, or that are the subject of Preservation Orders or have been registered in the Register of Historic
		Monuments. Contribute, as appropriate, towards the protection and preservation of archaeological sites, which have been identified subsequent to the publication of the Record of
		Monuments and Places.
		Consultation
		Consult with the National Monuments Service of the Department of Arts Heritage and the Gaeltacht in relation to proposed developments adjoining archaeological sites.
		Underwater Archaeological Sites
		Contribute, as appropriate, towards the protection and preservation of underwater archaeological sites in riverine, intertidal and sub-tidal locations.
		Architectural Heritage
		Contribute towards the protection of architectural heritage by complying, as appropriate, with the legislative provisions of the Planning and Development Act 2000 (as amended) in
		relation to architectural heritage and the policy guidance contained in the Architectural Heritage Protection Guidelines 2011 (and any updated/superseding document).
		Any alterations to architectural heritage or its context, including that which may arise as a result of the development of new or widened infrastructure, shall be in compliance with
		relevant legislation.
Soil	- Adverse impacts on the	Also see requirements under other heading of water above.
	hydrogeological and	Soil Protection and Contamination
	ecological function of the	Ensure that adequate soil protection measures are undertaken where appropriate. Adequate and appropriate investigations shall be carried out into the nature and extent of any soil
	soil resource as a result of	and groundwater contamination and the risks associated with site development work, where brownfield development is proposed.
	construction of transport	Areas of geological interest and GSI Datasets
	and associated transport	Contribute towards the appropriate protection and maintenance of the character, integrity and conservation value of features or areas of geological interest. Take GSI datasets into
	facilities/infrastructure.	account as appropriate, including those relating to geoheritage, groundwater, geohazards, natural resources and coastal vulnerability.
	- Adverse impacts on	Land Take
	features or areas of	Contribute towards the target of the National Planning Framework's (2018) SEA to "Maintain built surface cover nationally to below the EU average of 4%."
	geological/	
	geomorphological interest	
	as a result of construction	
	of transport and	
	associated transport	
	facilities/infrastructure.	
	- Potential for increase in	
	coastal/river bank erosion.	

# **Section 6** Conclusion

Stage 2 AA of the Draft Transport Strategy for the Greater Dublin Area has been carried out. Implementation of the Strategy has the potential to result in effects to the integrity of 66 European sites, if unmitigated.

The risks to the safeguarding and integrity of the qualifying interests, special conservation interests and conservation objectives of the European sites have been addressed by the inclusion of mitigation measures that will prioritise the avoidance of effects in the first place and mitigate effects where these cannot be avoided. In addition, all lower-level plans and projects arising through the implementation of the Strategy will themselves be subject to AA when further details of design and location are known.

In-combination effects from interactions with other plans and projects was considered in the assessment and the mitigation measures incorporated into the Strategy are seen to be robust to ensure there will be no significant adverse effects as a result of the implementation of the Strategy either alone or in-combination with other plans/projects.

Having incorporated mitigation measures, it is concluded that the Draft Transport Strategy for the Greater Dublin Area is not foreseen to give rise to any significant adverse effects on designated European sites, alone or in combination with other plans or projects<sup>51</sup>. This evaluation is made in view of the conservation objectives of the habitats or species, for which these sites have been designated.

The AA process is ongoing and will inform and be concluded at adoption of the Strategy.

-

<sup>&</sup>lt;sup>51</sup> Except as provided for in Article 6(4) of the Habitats Directive, viz. There must be: a) no alternative solution available, b) imperative reasons of overriding public interest for the plan to proceed; and c) Adequate compensatory measures in place.

# **Appendix I Background information on European sites**

List of European Sites considered by the assessment; including the Qualifying features (Qualifying Interests or Special Conservation Interests) and Site Vulnerability/Sensitivity

Site Code	Site Name	red by the assessment; including the Qualifying features (Qualifyin Qualifying Feature	Pressures Codes	Known Threats and Pressures
000006	Killyconny Bog	Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110]	J02.01, G05.04, D01.01,	
000006	(Cloghbally) SAC	Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110]	J02, B01, H05.01, G01, A08, A04.01.01, J01, G01.03.02, C01, F06.01, G05.09	Landfill, land reclamation and drying out, general, vandalism, paths, tracks, cycling tracks, human induced changes in hydraulic conditions, forest planting on open ground, garbage and solid waste, outdoor sports and leisure activities, recreational activities, fertilisation, intensive cattle grazing, fire and fire suppression, off-road motorized driving, mining and quarrying, game or bird breeding station, fences, fencing
000199	Baldoyle Bay SAC	Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Mediterranean salt meadows (Juncetalia maritimi) [1410], Mudflats and sandflats not covered by seawater at low tide [1140], Salicornia and other annuals colonising mud and sand [1310]	F02.03.01, G01.02, D01.02, K03.06, G01.01.02, J02.01.02, E01, G02.01, K02.03, E03, F03.01, X, I01	Bait digging or collection, walking, horse riding and non-motorised vehicles, roads, motorways, antagonism with domestic animals, non-motorized nautical sports, reclamation of land from sea, estuary or marsh, urbanised areas, human habitation, golf course, eutrophication (natural), discharges, hunting, invasive non-native species
000202	Howth Head SAC	Vegetated sea cliffs of the Atlantic and Baltic Coasts [1230], European dry heaths [4030]	A04.03, I01, X, E01, C01.01.01, G01.02, C01, J01.01, G05.04, D01.01	Abandonment of pastoral systems lack of grazing, invasive non-native species, urbanised areas, human habitation, sand and gravel quarries, walking, horse riding and non-motorised vehicles, mining and quarrying, burning down, vandalism, paths, tracks, cycling tracks
000204	Lambay Island SAC	Grey seal (Halichoerus grypus) [1364], Reefs [1170], Harbour seal (Phoca vitulina) [1365], Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]	F02.03, E01, F03.01, E02, A04, G01.01, X, A03	Leisure fishing, urbanised areas, human habitation, hunting, industrial or commercial areas, grazing, nautical sports, mowing or cutting of grassland
000205	Malahide Estuary SAC	Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Shifting dunes along the shoreline with Ammophila arenaria - white dunes [2120], Mudflats and sandflats not covered by seawater at low tide [1140], Fixed coastal dunes with herbaceous vegetation - grey dunes [2130], Salicornia and other annuals colonising mud and sand [1310], Mediterranean salt meadows (Juncetalia maritimi) [1410]	J02.01.02, E01, D01.02, G01.01, G02.01, A08, G01.02, F03.01, X, G01.03, I01, D01.05	Reclamation of land from sea, estuary or marsh, urbanised areas, human habitation, roads, motorways, nautical sports, golf course, fertilisation, walking, horse riding and non-motorised vehicles, hunting, motorised vehicles, invasive non-native species, bridge, viaduct
000206	North Dublin Bay SAC	Shifting dunes along the shoreline with Ammophila arenaria - white dunes [2120], Mudflats and sandflats not covered by seawater at low tide [1140], Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Petalwort (Petalophyllum ralfsii) [1395], Embryonic shifting dunes [2110], Fixed coastal dunes with herbaceous vegetation - grey dunes [2130], Humid dune slacks [2190], Mediterranean salt meadows (Juncetalia maritimi) [1410], Annual vegetation of drift lines [1210], Salicornia and other annuals colonising mud and sand [1310]	A04, G05.05, G01.01, F02.03, E02, E01, E03, G02.01, J01.01, H01.03, K03.06, G01.02, F02.03.01, I01, H01.09	Grazing, intensive maintenance of public parcs or cleaning of beaches, nautical sports, leisure fishing, industrial or commercial areas, urbanised areas, human habitation, discharges, golf course, burning down, other point source pollution to surface water, antagonism with domestic animals, walking, horse riding and non-motorised vehicles, bait digging or collection, invasive non-native species, diffuse pollution to surface waters due to other sources not listed
000208	Rogerstown Estuary SAC	Shifting dunes along the shoreline with Ammophila arenaria - white dunes [2120], Mediterranean salt meadows (Juncetalia maritimi) [1410], Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Mudflats and sandflats not covered by seawater at low tide [1140], Estuaries [1130], Salicornia and other annuals colonising mud and sand [1310]	A04, D01.02, G01.02, G02.01, F02.03.01, I01, J02.12.01, X, J02.01.02, A07, A08, E01.03, E03, G01.01, K01.01	Grazing, roads, motorways, walking, horse riding and non-motorised vehicles, golf course, bait digging or collection, invasive non-native species, sea defence or coast protection works, tidal barrages, reclamation of land from sea, estuary or marsh, use of biocides, hormones and chemicals, fertilisation, dispersed habitation, discharges, nautical sports, erosion
000210	South Dublin Bay SAC	Embryonic shifting dunes [2110], Mudflats and sandflats not covered by seawater at low tide [1140], Annual vegetation of drift lines [1210], Salicornia and other annuals colonising mud and sand [1310]	G01.01.02, K02.02, G01.01, H03, M01, E03, D01.02, J02.01.02, G01.02, E01, F02.03.01, K02, E02, D01.01	Non-motorized nautical sports, accumulation of organic material, nautical sports, marine water pollution, changes in abiotic conditions, discharges, roads, motorways, reclamation of land from sea, estuary or marsh, walking, horse riding and non-motorised vehicles, urbanised areas, human habitation, bait diaging or collection, biocenotic evolution, succession, industrial or commercial areas, paths, tracks, cycling tracks
000391	Ballynafagh Bog SAC	Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120]	B01, C01.03, E01.04, G05, D05, J01	Forest planting on open ground, peat extraction, other patterns of habitation, other human intrusions and disturbances, improved access to site, fire and fire suppression
000396	Pollardstown Fen SAC	Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210], Petrifying springs with tufa formation (Cratoneurion) [7220], Desmoulin's whorl snail (Vertigo moulinsiana) [1016], Alkaline fens [7230], Narrow-mouthed whorl snail (Vertigo angustior) [1014], Geyer's whorl snail (Vertigo geyeri) [1013]	D02.01, A04, E03.01, C01.01, F02.03, J01, F03.01, B, E01.03	Electricity and phone lines, grazing, disposal of household or recreational facility waste, sand and gravel extraction, leisure fishing, fire and fire suppression, hunting, sylviculture, forestry, dispersed habitation
000397	Red Bog, Kildare SAC	Transition mires and quaking bogs [7140]	F02.03, C01.01, A04, F03.01, E01.03, A08	Leisure fishing, sand and gravel extraction, grazing, hunting, dispersed habitation, fertilisation
000455	Dundalk Bay SAC	Mudflats and sandflats not covered by seawater at low tide [1140], Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Estuaries [1130], Salicornia and other annuals colonising mud and sand [1310], Perennial vegetation of stony banks [1220], Mediterranean salt meadows (Juncetalia maritimi) [1410]	G01.01.01, J02.04.01, E03.03, H01, H05, E03.01, K04.01, K02, H05.01, F02.03.01, G02, G05.02, J03.01, J02.01.03, M02.04, H04.02, J03.02, G02.09, J02.01.02, F05, H01.06, K01.01, H02.06, G01, I01, J02.04, J02.12.01	Motorized nautical sports, flooding, disposal of inert materials, pollution to surface waters (limnic & terrestrial, marine & brackish), soil pollution and solid waste (excluding discharges), disposal of household or recreational facility waste, competition (flora), biocenotic evolution, succession, garbage and solid waste, bait digging or collection, sport and leisure structures, shallow surface abrasion or mechanical damage to seabed surface, reduction or loss of specific habitat features, infilling of ditches, dykes, ponds, pools, marshes or pits, migration of species (natural newcomers), nitrogeninput, anthropogenic reduction of habitat connectivity, wildlife watching, reclamation of land from sea, estuary or marsh, illegal taking or removal of marine fauna, diffuse pollution to surface waters due to transport and infrastructure without connection to canalization or sweepers, erosion, diffuse groundwater pollution due to agricultural and forestry activities, outdoor sports and leisure activities, recreational activities, invasive non-native species, flooding modifications, sea defence or coast protection works, tidal barrages
000582	Raheenmore Bog SAC	Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150]	X, J02.01.03, A02.01	Infilling of ditches, dykes, ponds, pools, marshes or pits, Agricultural intensification
000679	Garriskil Bog SAC	Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110]	I01, C01.03.02, J02.15, A04.02.01, J01.01, I02	Invasive non-native species, mechanical removal of peat, other human induced changes in hydraulic conditions, non-intensive cattle grazing, burning down, problematic native species

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
000685	Lough Ennell SAC	Alkaline fens [7230]	D01.01, A04.02.05, H01.05, A04.03, F02.03.02, J02.01, H06.02, H01.08, H06.01.01, K03.01, J02.05.02, B02.02, A04.01.01, F03.01	Paths, tracks, cycling tracks, non-intensive mixed animal grazing, diffuse pollution to surface waters due to agricultural and forestry activities, abandonment of pastoral systems lack of grazing, pole fishing, landfill, land reclamation and drying out, general, light pollution, diffuse pollution to surface waters due to household sewage and waste waters, point source or irregular noise pollution, competition (fauna), modifying structures of inland water courses, forestry clearance, intensive cattle grazing, hunting
000713	Ballyman Glen SAC	Alkaline fens [7230], Petrifying springs with tufa formation (Cratoneurion) [7220]	A08, B01, E03.01, E01.01, A10.01, E01.02, D01.02, C01.01, A01, H02.01, A04, H01.03	Fertilisation, forest planting on open ground, disposal of household or recreational facility waste, continuous urbanisation, removal of hedges and coppice or scrub, discontinuous urbanisation, roads, motorways, sand and gravel extraction, cultivation, groundwater pollution by leakages from contaminated sites, grazing, other point source pollution to surface water
000714	Bray Head SAC	European dry heaths [4030], Vegetated sea cliffs of the Atlantic and Baltic Coasts [1230]	J01.01, E01, G01.03, K02.01, D01.01, A10.01, K01.01, G05.04, A04.02.01	Burning down, urbanised areas, human habitation, motorised vehicles, species composition change (succession), paths, tracks, cycling tracks, removal of hedges and coppice or scrub, erosion, vandalism, non-intensive cattle grazing
000716	Carriggower Bog SAC	Transition mires and quaking bogs [7140]	A04.02.03, K02.01, E01.03, A08, J02.08, A04.03, J02.01, B01	Non intensive horse grazing, species composition change (succession), dispersed habitation, fertilisation, raising the groundwater table or artificial recharge of groundwater, abandonment of pastoral systems lack of grazing, landfill, land reclamation and drying out, general, forest planting on open ground
000717	Deputy's Pass Nature Reserve SAC	Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	B, G01.02, G02.06, I01, E03.01, G05.04, B02.01.01, A04, B06	Sylviculture, forestry, walking, horse riding and non-motorised vehicles, attraction park, invasive non- native species, disposal of household or recreational facility waste, vandalism, forest replanting (native trees), grazing, grazing in forests or woodland
000719	Glen of the Downs SAC	Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	G01.02, G02.01, G05.04, G05.07, G05.06, I01, A04, J01.01, G02.06, D01.02	Walking, horse riding and non-motorised vehicles, golf course, vandalism, missing or wrongly directed conservation measures, tree surgery, felling for public safety, removal of roadside trees, invasive non-native species, grazing, burning down, attraction park, roads, motorways
000725	Knocksink Wood SAC	Petrifying springs with tufa formation (Cratoneurion) [7220], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	E03.01, A04, G01.02, G03, G05.06, D01.02, B02.03, G02.08, I01, D01.01, G05.07, B01, G05.04, D05, E01.02, B01.02	Disposal of household or recreational facility waste, grazing, walking, horse riding and non-motorised vehicles, interpretative centres, tree surgery, felling for public safety, removal of roadside trees, roads, motorways, removal of forest undergrowth, camping and caravans, invasive non-native species, paths, tracks, cycling tracks, missing or wrongly directed conservation measures, forest planting on open ground, vandalism, improved access to site, discontinuous urbanisation, artificial planting on open ground (non-native trees)
000729	Buckroney-Brittas Dunes and Fen SAC	Atlantic decalcified fixed dunes (Calluno-Ulicetea) [2150], Annual vegetation of drift lines [1210], Alkaline fens [7230], Fixed coastal dunes with herbaceous vegetation - grey dunes [2130], Shifting dunes along the shoreline with Ammophila arenaria - white dunes [2120], Humid dune slacks [2190], Embryonic shifting dunes [2110], Perennial vegetation of stony banks [1220], Mediterranean salt meadows (Juncetalia maritimi) [1410], Dunes with Salix repens ssp. argentea (Salicion arenariae) [2170]	E03.01, A04.02, J02, A10.01, A03.02, A08, K01.01, G02.08, G05.04, D04.01, K02.01, J01, G01.02, G02.01, I01, G05.01, E01.02, A04.01.01, H02.07, F03.01, A05.02	Disposal of household or recreational facility waste, non-intensive grazing, human induced changes in hydraulic conditions, removal of hedges and coppice or scrub, non-intensive mowing, fertilisation, erosion, camping and caravans, vandalism, airport, species composition change (succession), fire and fire suppression, walking, horse riding and non-motorised vehicles, golf course, invasive non-native species, trampling, overuse, discontinuous urbanisation, intensive cattle grazing, diffuse groundwater pollution due to non-sewered population, hunting, stock feeding
000733	Vale of Clara (Rathdrum Wood) SAC	Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	G01.02, E01.03, B02.01.01, F03.02, F04.02, F05.04, B04, F03.01.01, I01	Walking, horse riding and non-motorised vehicles, dispersed habitation, forest replanting (native trees), taking and removal of animals (terrestrial), collection (fungi, lichen, berries etc.), poaching, use of biocides, hormones and chemicals (forestry), damage caused by game (excess population density), invasive non-native species
000770	Blackstairs Mountains SAC	European dry heaths [4030], Northern Atlantic wet heaths with Erica tetralix [4010]	J01.01, A04.02, B02, G01.02, K01.01, A04.01.02, G01.03.02, E03, K02.01	Burning down, non-intensive grazing, forest and plantation management & use, walking, horse riding and non-motorised vehicles, erosion, intensive sheep grazing, off-road motorized driving, discharges, species composition change (succession)
000781	Slaney River Valley SAC	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260], Harbour seal ( <i>Phoca vitulina</i> ) [1365], Estuaries [1130], Mudflats and sandflats not covered by seawater at low tide [1140], River lamprey ( <i>Lampetra fluviallis</i> ) [1099], Alluvial forests with Alnus glutinosa and Fraxinus excelsior ( <i>Alno-Padion, Alnion incanae, Salicion albae</i> ) [91E0], Atlantic salmon ( <i>Salmo salar</i> ) [1106], Atlantic salt meadows ( <i>Glauco-Puccinellietalia maritimae</i> ) [1330], Twaite shad ( <i>Alosa fallax</i> ) [1103], Otter ( <i>Lutra lutra</i> ) [1355], Brook lamprey ( <i>Lampetra planeri</i> ) [1096], Mediterranean salt meadows ( <i>Juncetalia maritimi</i> ) [1410], Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0], Sea lamprey ( <i>Petromyzon marinus</i> ) [1095], Freshwater pearl mussel ( <i>Margaritifera margaritifera</i> ) [1029]	D03.01.03, A01, H01, H01.08, K01.01, H01.05, A09, F03.02.04, J02, J02.11, F02.03.01, J02.06.01, A08, J02.06, D01.05, C01.01, H01.01, D01.01, E05, J02.05.02, J02.12.02, I01, E03, B02, F01.03, A10.01	Fishing harbours, cultivation, pollution to surface waters (limnic & terrestrial, marine & brackish), diffuse pollution to surface waters due to household sewage and waste waters, erosion, diffuse pollution to surface waters due to agricultural and forestry activities, irrigation, predator control, human induced changes in hydraulic conditions, siltation rate changes, dumping, depositing of dredged deposits, bait digging or collection, surface water abstractions for agriculture, fertilisation, water abstractions from surface waters, bridge, viaduct, sand and gravel extraction, pollution to surface waters by industrial plants, paths, tracks, cycling tracks, storage of materials, modifying structures of inland water courses, dykes and flooding defence in inland water systems, invasive non-native species, discharges, forest and plantation management & use, bottom culture, removal of hedges and coppice or scrub
000925	The Long Derries, Edenderry SAC	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia)  * important orchid sites [6210]	K01.01, E05, X, A04.03, K02.01, G01.03.02, D01	Erosion, storage of materials, abandonment of pastoral systems lack of grazing, species composition change (succession), off-road motorized driving, roads, paths and railroads
001209	Glenasmole Valley SAC	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410], Petrifying springs with tufa formation (Cratoneurion) [7220], Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210]	A04, B02.01.02, D01.03, B01.01, A03.03, I01, H01.08, D01, B02.02, E01.02, A04.02.01, B01.02, H02.07, J02, H01.05, A03, A08, A04.02.03, C01.03, F02.03, A04.02.02	Grazing, forest replanting (non-native trees), car parcs and parking areas, forest planting on open ground (native trees), abandonment or lack of mowing, invasive non-native species, diffuse pollution to surface waters due to household sewage and waste waters, roads, paths and railroads, forestry clearance, discontinuous urbanisation, non-intensive cattle grazing, artificial planting on open ground (non-native trees), diffuse groundwater pollution due to non-sewered population, human induced changes in hydraulic conditions, diffuse pollution to surface waters due to agricultural and forestry activities, mowing or cutting of grassland, fertilisation, non-intensive horse grazing, peat extraction, leisure fishing, non-intensive sheep grazing
001387	Ballynafagh Lake SAC	Desmoulin`s whorl snail <i>(Vertigo moulinsiana) [1016]</i> , Marsh Fritillary <i>(Euphydryas aurinia)</i> [1065], Alkaline fens [7230]	A04, F02.03	Grazing, leisure fishing

		Appropriate Assessment of the Braft Transport of	atogy for the ereator	D4011171104 2022 2012
Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
001398	Rye Water Valley/Carton SAC	Narrow-mouthed whorl snail (Vertigo angustior) [1014], Petrifying springs with tufa formation (Cratoneurion) [7220], Desmoulin`s whorl snail (Vertigo moulinsiana) [1016]	E01.01, A08, D01.02, E01.03, B, A04, A10.01, J02.05.02	Continuous urbanisation, fertilisation, roads, motorways, dispersed habitation, sylviculture, forestry, grazing, removal of hedges and coppice or scrub, modifying structures of inland water courses
001459	Clogher Head SAC	European dry heaths [4030], Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]	E05, J03.01, G02, X, A04.02, F02.01, D03.01.03, J02.12.01, E03.01, I01, E06.02, D03.01.02, A04.03, D01.01, D03.01	Storage of materials, reduction or loss of specific habitat features, sport and leisure structures, non- intensive grazing, professional passive fishing, fishing harbours, sea defence or coast protection works, tidal barrages, disposal of household or recreational facility waste, invasive non-native species, reconstruction, renovation of buildings, piers or tourist harbours or recreational piers, abandonment of pastoral systems lack of grazing, paths, tracks, cycling tracks, port areas
001742	Kilpatrick Sandhills SAC	Fixed coastal dunes with herbaceous vegetation - grey dunes [2130], Atlantic decalcified fixed dunes (Calluno-Ulicetea) [2150], Annual vegetation of drift lines [1210], Shifting dunes along the shoreline with Ammophila arenaria - white dunes [2120], Embryonic shifting dunes [2110]	I02, J01.01, E03.01, G01.03.02, X, J02.12.01, K02.01, G01, K01.01	Problematic native species, burning down, disposal of household or recreational facility waste, off- road motorized driving, sea defence or coast protection works, tidal barrages, species composition change (succession), outdoor sports and leisure activities, recreational activities, erosion
001757	Holdenstown Bog SAC	Transition mires and quaking bogs [7140]	J02, J02.01.03, A01, X, B01, D02.01.01, A04	Human induced changes in hydraulic conditions, infilling of ditches, dykes, ponds, pools, marshes or pits, cultivation, forest planting on open ground, suspended electricity and phone lines, grazing
001766	Magherabeg Dunes SAC	Shifting dunes along the shoreline with Ammophila arenaria - white dunes [2120], Petrifying springs with tufa formation ( <i>Cratoneurion</i> ) [7220], Embryonic shifting dunes [2110], Fixed coastal dunes with herbaceous vegetation - grey dunes [2130], Annual vegetation of drift lines [1210]	A04.02, G05.07, G05.04, H01.04, H01.01, G01.02, A04.03, K02.01, K01.01	Non intensive grazing, missing or wrongly directed conservation measures, vandalism, diffuse pollution to surface waters via storm overflows or urban run-off, pollution to surface waters by industrial plants, walking, horse riding and non-motorised vehicles, abandonment of pastoral systems lack of grazing, species composition change (succession), erosion
001810	White Lough, Ben Loughs and Lough Doo SAC	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140], White-clawed crayfish (Austropotamobius pallipes) [1092]	G01, A04.03, E03.03, A08, A11, F03.02.03, J02.01	Outdoor sports and leisure activities, recreational activities, abandonment of pastoral systems lack of grazing, disposal of inert materials, fertilisation, agriculture activities not referred to above, trapping, poisoning, poaching, landfill, land reclamation and drying out
001957	Boyne Coast and Estuary SAC	Mudflats and sandflats not covered by seawater at low tide [1140], Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Fixed coastal dunes with herbaceous vegetation - grey dunes [2130], Embryonic shifting dunes [2110], Estuaries [1130], Shifting dunes along the shoreline with Ammophila arenaria - white dunes [2120], Salicornia and other annuals colonising mud and sand [1310], Annual vegetation of drift lines [1210]	J02.01.03, E01, J02.12.01, H01, G01.02, E03.03, G05.04, J02.12, L07, G01.03.02, J02, D01.01, K02, G05, D01.05, E03.01, J03.03, G03, J02.02, E05, I01	Infilling of ditches, dykes, ponds, pools, marshes or pits, urbanised areas, human habitation, sea defence or coast protection works, tidal barrages, pollution to surface waters (limnic & terrestrial, marine & brackish), walking, horse riding and non-motorised vehicles, disposal of inert materials, vandalism, dykes, embankments, artificial beaches, general, storm, cyclone, off-road motorized driving, human induced changes in hydraulic conditions, paths, tracks, cycling tracks, biocenotic evolution, succession, other human intrusions and disturbances, bridge, viaduct, disposal of household or recreational facility waste, reduction, lack or prevention of erosion, interpretative centres, removal of sediments (mud), storage of materials, invasive non-native species
002120	Lough Bane and Lough Glass SAC	White-clawed crayfish (Austropotamobius pallipes) [1092], Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140]	J02.06.02, A10.01	Surface water abstractions for public water supply, removal of hedges and coppice or scrub
002121	Lough Lene SAC	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140], White-clawed crayfish (Austropotamobius pallipes) [1092]	A04.03, A11, A08, H01.08, D03.01.02, X	Abandonment of pastoral systems lack of grazing, agriculture activities not referred to above, fertilisation, diffuse pollution to surface waters due to household sewage and waste waters, piers or tourist harbours or recreational piers, no threats or pressures
002122	Wicklow Mountains SAC	Blanket bogs * if active bog [7130], Northern Atlantic wet heaths with Erica tetralix [4010], European dry heaths [4030], Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0], Siliceous rocky slopes with chasmophytic vegetation [8220], Calaminarian grasslands of the Violetalia calaminariae [6130], Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110], Otter (Lutra lutra) [1355], Natural dystrophic lakes and ponds [3160], Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) [8110], Species-rich Nardus grasslands, on siliceous substrates in mountain areas - and submountain areas in Continental Europe [6230], Alpine and Boreal heaths [4060], Calcareous rocky slopes with chasmophytic vegetation [8210]	B02.05, G05.06, G04.01, F03.02.02, B06, F03, J01.01, D01.01, C01.03, G01.03.02, F04.02, G05.04, G01, A04, L05, G01.04, G05.09, G02.09, E01, K04.05, G05.01, E03.01, G05.07, I01, G01.02, K01.01, A05.02	Non- intensive timber production (leaving dead wood or old trees untouched), tree surgery, felling for public safety, removal of roadside trees, military manoeuvres, taking from nest (e.g. falcons), grazing in forests or woodland, hunting and collection of wild animals (terrestrial), burning down, paths, tracks, cycling tracks, peat extraction, off-road motorized driving, collection (fungi, lichen, berries etc.), vandalism, outdoor sports and leisure activities, recreational activities, grazing, collapse of terrain, landslide, mountaineering, rock climbing, speleology, fences, fencing, wildlife watching, urbanised areas, human habitation, damage by herbivores (including game species), trampling, overuse, disposal of household or recreational facility waste, missing or wrongly directed conservation measures, invasive non-native species, walking, horse riding and non-motorised vehicles, erosion, stock feeding
002141 002162	Mountmellick SAC River Barrow and River Nore SAC	Desmoulin's whorl snail (Vertigo moulinsiana) [1016] Otter (Lutra lutra) [1355], Desmoulin's whorl snail (Vertigo moulinsiana) [1016], Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], White-clawed crayfish (Austropotamobius pallipes) [1092], European dry heaths [4030], Petrifying springs with tufa formation (Cratoneurion) [7220], Reefs [1170], Nore Pearl Mussel (Margaritifera durrovensis) [1990], Mudflats and sandflats not covered by seawater at low tide [1140], Atlantic salmon (Salmo salar) [1106], Twaite shad (Alosa fallax) [1103], Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430], Killarney fern (Trichomanes speciosum) [1421], River lamprey (Lampetra fluviatilis) [1099], Sea lamprey (Petromyzon marinus) [1095], Salicornia and other annuals colonising mud and sand [1310], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Estuaries [1130], Brook lamprey (Lampetra planeri) [1096], Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260], Freshwater pearl mussel (Margaritifera margaritifera) [1029], Old sessile oak woods with llex and Blechnum in the British Isles [9140], Mediterranean salt meadows (Juncetalia maritimi) [1410]	J02.05, H05.01 C01.03, B07, F01.01, H01, B02.01.01, D03.01, J02.02.01, A10.01, J02.06, A04.01.01, C01.01.01, J03.02.01, B05, F02.03, E02, J02.12.02, A02.01, F02.01.02, J02, K01.01, J02.05.02, I01, M01, B02, F02	Modification of hydrographic functioning, general, garbage and solid waste  Peat extraction, forestry activities not referred to above, intensive fish farming, intensification, pollution to surface waters (limnic & terrestrial, marine & brackish), forest replanting (native trees), port areas, dredging or removal of limnic sediments, removal of hedges and coppice or scrub, water abstractions from surface waters, intensive cattle grazing, sand and gravel quarries, reduction in migration or migration barriers, use of fertilizers (forestry), leisure fishing, industrial or commercial areas, dykes and flooding defence in inland water systems, agricultural intensification, netting, human induced changes in hydraulic conditions, erosion, modifying structures of inland water courses, invasive non-native species, changes in abiotic conditions, forest and plantation management & use, fishing and harvesting aquatic resources
002193	Ireland's Eye SAC	Perennial vegetation of stony banks [1220], Vegetated sea cliffs of the Atlantic and Baltic Coasts [1230]	X, J01, G01.01, G02.09, G01.02, A04.03, G05.01	fire and fire suppression, nautical sports, wildlife watching, walking, horse riding and non-motorised vehicles, abandonment of pastoral systems lack of grazing, trampling, overuse
002201	Derragh Bog SAC	Degraded raised bogs still capable of natural regeneration [7120], Bog woodland [91D0]	I02, I01, B02.02, J02.15, J01.01	Problematic native species, invasive non-native species, forestry clearance, other human induced changes in hydraulic conditions, burning down
002203	Girley (Drewstown) Bog SAC	Degraded raised bogs still capable of natural regeneration [7120]	I01, J02.15, I02, J01.01, J02.01, B02.02	Invasive non-native species, other human induced changes in hydraulic conditions, problematic native species, burning down, landfill, land reclamation and drying out, general, forestry clearance

		Appropriate Assessment of the Draft Transport Str	arogj for the ordator	
Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
002205	Wooddown Bog SAC	Degraded raised bogs still capable of natural regeneration [7120]	I01, J02.15, J01.01, I02, B02.02, C01.03.01, J02.01	Invasive non-native species, other human induced changes in hydraulic conditions, burning down, problematic native species, forestry clearance, hand cutting of peat, landfill, land reclamation and drying out, general
002249	The Murrough Wetlands SAC	Alkaline fens [7230], Mediterranean salt meadows (Juncetalia maritimi) [1410], Annual vegetation of drift lines [1210], Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210], Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Perennial vegetation of stony banks [1220]	D01.01, A08, J02.05.01, A04, B, G01.02, D01.04, C01.01, J02.12.01, K01.01, E03.02	Paths, tracks, cycling tracks, fertilisation, modification of water flow (tidal & marine currents), grazing, sylviculture, forestry, walking, horse riding and non-motorised vehicles, railway lines, tgv, sand and gravel extraction, sea defence or coast protection works, tidal barrages, erosion, disposal of industrial waste
002256	Ballyprior Grassland SAC	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia)  * important orchid sites [6210]	A03, A04, A08, D01.01, A10.01, B02.01, A10	Mowing or cutting of grassland, grazing, fertilisation, paths, tracks, cycling tracks, removal of hedges and coppice or scrub, forest replanting, restructuring agricultural land holding
002274	Wicklow Reef SAC	Reefs [1170]	F05.02, F02.01.02, F02.02.01, J02.11.01, F02.01.01, G01.07, F02.02.05, F02.03	Date mussel-fishing, netting, benthic or demersal trawling, dumping, depositing of dredged deposits, potting, scuba diving, snorkelling, benthic dredging, leisure fishing
002299	River Boyne and River Blackwater SAC	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Otter (Lutra lutra) [1355], River lamprey (Lampetra fluviatilis) [1099], Alkaline fens [7230], Atlantic salmon (Salmo salar) [1106]	A01, E05, J02.15, G05, E02, A03, D01.05, E03.02, G01, D01.02, J02.10, J02.05.02, E03.04, A10.01, J02, A07, I01, H01, A08, A05.02, E01.04, G05.06, J02.11, B01.02, C01.01, G02.10	Cultivation, storage of materials, other human induced changes in hydraulic conditions, other human intrusions and disturbances, industrial or commercial areas, mowing or cutting of grassland, bridge, viaduct, disposal of industrial waste, outdoor sports and leisure activities, recreational activities, roads, motorways, management of aquatic and bank vegetation for drainage purposes, modifying structures of inland water courses, other discharges, removal of hedges and or scrub, human induced changes in hydraulic conditions, use of biocides, hormones and chemicals, invasive non-native species, pollution to surface waters (limnic & terrestrial, marine & brackish), fertilisation, stock feeding, other patterns of habitation, tree surgery, felling for public safety, removal of roadside trees, siltation rate changes, dumping, depositing of dredged deposits, artificial planting on open ground (non-native trees), sand and gravel extraction, other sport or leisure complexes
002331	Mouds Bog SAC	Degraded raised bogs still capable of natural regeneration [7120], Depressions on peat substrates of the Rhynchosporion [7150], Active raised bogs [7110]	A01, A04, E02, J01, C01.03.02, B, I01	Cultivation, grazing, industrial or commercial areas, fire and fire suppression, mechanical removal of peat, sylviculture, forestry, invasive non-native species
002340	Moneybeg and Clareisland Bogs SAC	Degraded raised bogs still capable of natural regeneration [7120], Depressions on peat substrates of the Rhynchosporion [7150], Active raised bogs [7110]	G02.10, B02.02, J02.15, I01, J01.01, F03.01, E03.01, C01.03.02	Other sport or leisure complexes, forestry clearance, other human induced changes in hydraulic conditions, invasive non-native species, burning down, hunting, disposal of household or recreational facility waste, mechanical removal of peat
002341	Ardagullion Bog SAC	Active raised bogs [7110], Degraded raised bogs still capable of natural regeneration [7120], Depressions on peat substrates of the Rhynchosporion [7150]	J02.15, X	Other human induced changes in hydraulic conditions, no threats or pressures
002342	Mount Hevey Bog SAC	Active raised bogs [7110], Degraded raised bogs still capable of natural regeneration [7120], Depressions on peat substrates of the Rhynchosporion [7150]	J02.03, J02.05, K04.02, E03.01, I03, D01.04, B02.02, I01, C01.03.02, J02.01, D01.01	Canalisation & water deviation, modification of hydrographic functioning, general, parasitism (flora), disposal of household or recreational facility waste, introduced genetic material, GMO, railway lines, TGV, forestry clearance, invasive non-native species, mechanical removal of peat, landfill, land reclamation and drying out, general, paths, tracks, cycling tracks
003000	Rockabill to Dalkey Island SAC	Reefs [1170], Harbour porpoise (Phocoena phocoena) [1351]	E03, D02, X, J02.11, F02.02, J02.02, D03.02, H06.01	Discharges, utility and service lines, siltation rate changes, dumping, depositing of dredged deposits, professional active fishing, removal of sediments (mud), shipping lanes, noise nuisance, noise pollution
004006	North Bull Island SPA	Wetland and Waterbirds [A999], Knot (Calidris canutus) [A143], Dunlin (Calidris alpina) [A149], Shelduck (Tadorna tadorna) [A048], Light-bellied Brent Goose (Branta bernicla hrota) [A046], Pintail (Anas acuta) [A054], Sanderling (Calidris alba) [A144], Oystercatcher (Haematopus ostralegus) [A130], Golden Plover (Pluvialis apricaria) [A140], Bar-tailed Godwit (Limosa lapponica) [A157], Black-tailed Godwit (Limosa limosa) [A156], Curlew (Numenius arquata) [A160], Turnstone (Arenaria interpres) [A169], Grey Plover (Pluvialis squatarola) [A141], Redshank (Tringa totanus) [A162], Black-headed Gull (Chroicocephalus ridibundus) [A179], Shoveler (Anas ciypeata) [A056], Teal (Anas crecca) [A052]	E01.04, D01.02, G01.02, G03, F02.03.01, G02.01, E02, D03.02, E01.01, E03, D01.05, G01.01	Other patterns of habitation, roads, motorways, walking, horse riding and non-motorised vehicles, interpretative centres, bait digging or collection, golf course, industrial or commercial areas, shipping lanes, continuous urbanisation, discharges, bridge, viaduct, nautical sports
004014	Rockabill SPA	Common tern (Sterna hirundo) [A193], Purple Sandpiper (Calidris maritima) [A148], Arctic tern (Sterna paradisaea) [A194], Roseate Tern (Sterna dougaliii) [A192]	G01.01, D06	Nautical sports, other forms of transportation and communication
004015	Rogerstown Estuary SPA	Greylag Goose (Anser anser) [A043], Shelduck (Tadorna tadorna) [A048], Wetland and Waterbirds [A999], Oystercatcher (Haematopus ostralegus) [A130], Redshank (Tringa totanus) [A162], Ringed Plover (Charadrius hiaticula) [A137], Shoveler (Anas clypeata) [A056], Knot (Calidris canutus) [A143], Dunlin (Calidris alpina) [A149], Black-tailed Godwit (Limosa limosa) [A156], Light-bellied Brent Goose (Branta bernicla hrota) [A046], Grey Plover (Pluvialis squatarola) [A141]	J02.01, F03.01, A08, E03.01, E03.02, A04, E01.03, I01, G01.01, G02.01, F02.03.01	Landfill, land reclamation and drying out, general, hunting, fertilisation, disposal of household or recreational facility waste, disposal of industrial waste, grazing, dispersed habitation, invasive non-native species, nautical sports, golf course, bait digging or collection
004016	Baldoyle Bay SPA	Light-bellied Brent Goose (Branta bernicla hrota) [A046], Shelduck (Tadorna tadorna) [A048], Ringed Plover (Charadrius hiaticula) [A137], Golden Plover (Pluvialis apricaria) [A140], Wetland and Waterbirds [A999], Bar-tailed Godwit (Limosa lapponica) [A157], Grey Plover (Pluvialis squatarola) [A141]	D01.02, G02.01, E01, K02.03, A08, G01.02, F02.03.01, F03.01, J02.01.02, I01	Roads, motorways, golf course, urbanised areas, human habitation, eutrophication (natural), fertilisation, walking, horse riding and non-motorised vehicles, bait digging or collection, hunting, reclamation of land from sea, estuary or marsh, invasive non-native species
004024	South Dublin Bay and Tolka Estuary SPA	Arctic tern (Sterna paradisaea) [A194], Redshank (Tringa totanus) [A162], Common tern (Sterna hirundo) [A193], Ringed Plover (Charadrius hiaticula) [A137], Dunlin (Calidris alpina) [A149], Oystercatcher (Haematopus ostralegus) [A130], Sanderling (Calidris alba) [A144], Wetland and Waterbirds [A999], Grey Plover (Pluvialis squatarola) [A141], Roseate Tern (Sterna dougallii) [A192], Light-bellied Brent Goose (Branta bernicla hrota) [A046], Bar-tailed Godwit (Limosa lapponica) [A157], Knot (Calidris canutus) [A143], Black-headed Gull (Chroicocephalus ridibundus) [4179]	E01, E03, E02, F02.03, G01.01, D01.02, K02.03, G01.02, F02.03.01, J02.01.02	Urbanised areas, human habitation, discharges, industrial or commercial areas, leisure fishing, nautical sports, roads, motorways, eutrophication (natural), walking, horse riding and non-motorised vehicles, bait digging or collection, reclamation of land from sea, estuary or marsh

			_ '''	
Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
004025	Broadmeadow/Swords Estuary SPA	Black-tailed Godwit (Limosa limosa) [A156], Grey Plover (Pluvialis squatarola) [A141], Pintail (Anas acuta) [A054], Knot (Calidris canutus) [A143], Shelduck (Tadorna tadorna) [A048], Light-bellied Brent Goose (Branta bernicla hrota) [A046], Bar-tailed Godwit (Limosa lapponica) [A157], Dunlin (Calidris alpina) [A149], Goldeneye (Bucephala clangula) [A067], Golden Plover (Pluvialis apricaria) (A140), Wetland and Waterbirds [A999], Great Crested Grebe (Podiceps cristatus) [A005], Oystercatcher (Haematopus ostralegus) [A130], Red-breasted Merganser (Mergus serrator) [A069], Redshank (Tringa totanus) [A162]	D01.04, E02, D01.05, I01, D01.01, G01.01, G01.02, E01, J02.01.02, A08	Railway lines, TGV, industrial or commercial areas, bridge, viaduct, invasive non-native species, paths, tracks, cycling tracks, nautical sports, walking, horse riding and non-motorised vehicles, urbanised areas, human habitation, reclamation of land from sea, estuary or marsh, fertilisation
004026	Dundalk Bay SPA	Teal (Anas crecca) [A052], Dunlin (Calidris alpina) [A149], Curlew (Numenius arquata) [A160], Lapwing (Vanellus vanellus) [A142], Black-headed Gull (Chroicocephalus ridibundus) [A179], Great Crested Grebe (Podiceps cristatus) [A005], Light-bellied Brent Goose (Branta bernicla hrota) [A046], Grey Plover (Pluvialis squatarola) [A141], Red-breasted Merganser (Mergus serrator) [A069], Knot (Calidris canutus) [A143], Pintail (Anas acuta) [A054], Black-tailed Godwit (Limosa limosa) [A156], Ringed Plover (Charadrius hiaticula) [A137], Redshank (Tringa totanus) [A162], Wetland and Waterbirds [A999], Common Gull (Larus canus) [A182], Shelduck (Tadorna tadorna) [A048], Greylag Goose (Anser anser) [A043], Herring Gull (Larus argentatus) [A184], Bar-tailed Godwit (Limosa lapponica) [A157], Common Scoter (Melanitta nigra) [A065], Oystercatcher (Haematopus ostralegus) [A130], Mallard (Anas platyrhynchos) [A053], Golden Plover (Pluvialis apricaria) [A140]	E02, A04, D03.02, E01.03, E03, G01.02, I01, F02.03, G01.01, E01, J02.12, D01.02, A08, J02.11	Industrial or commercial areas, grazing, shipping lanes, dispersed habitation, discharges, walking, horse riding and non-motorised vehicles, invasive non-native species, leisure fishing, nautical sports, urbanised areas, human habitation, dykes, embankments, artificial beaches, general, roads, motorways, fertilisation, siltation rate changes, dumping, depositing of dredged deposits
004040	Wicklow Mountains SPA	Peregrine falcon (Falco peregrinus) [A103], Merlin (Falco columbarius) [A098]	B, A04, C01.03, G01.02, G03, D01.01	Sylviculture, forestry, grazing, peat extraction, walking, horse riding and non-motorised vehicles, interpretative centres, paths, tracks, cycling tracks
004043	Lough Derravaragh SPA	Tufted Duck (Aythya fuligula) [A061], Wetland and Waterbirds [A999], Pochard (Aythya ferina) [A059], Whooper Swan (Cygnus cygnus) [A038], Coot (Fulica atra) [A125]	F03.01, B, A08, F02.03, A05.01	Hunting, sylviculture, forestry, fertilisation, leisure fishing, animal breeding
004044	Lough Ennell SPA	Pochard (Aythya ferina) [A059], Wetland and Waterbirds [A999], Coot (Fulica atra) [A125], Tufted Duck (Aythya fuligula) [A061]	A08, G01.02, F02.03, F03.01, G01.01, G05.01, B, E01	Fertilisation, walking, horse riding and non-motorised vehicles, leisure fishing, hunting, nautical sports, trampling, overuse, sylviculture, forestry, urbanised areas, human habitation
004061	Lough Kinale and Derragh Lough SPA	Tufted Duck (Aythya fuligula) [A061], Pochard (Aythya ferina) [A059], Wetland and Waterbirds [A999]	F02.03, F03.01, A05.01, B, A08, X	Leisure fishing, hunting, animal breeding, sylviculture, forestry, fertilisation, no threats or pressures
004063	Poulaphouca Reservoir SPA	Lesser Black-backed Gull (Larus fuscus) [A183], Greylag Goose (Anser anser) [A043]	F02.03, G01.01, B01, F03.01, D01.05	Leisure fishing, nautical sports, forest planting on open ground, hunting, bridge, viaduct
004065	Lough Sheelin SPA	Goldeneye (Bucephala clangula) [A067], Pochard (Aythya ferina) [A059], Great Crested Grebe (Podiceps cristatus) [A005], Tufted Duck (Aythya fuligula) [A061], Wetland and Waterbirds [A999]	B, F02.03, A05.01, A08	Sylviculture, forestry, leisure fishing, animal breeding, fertilisation
004069	Lambay Island SPA	Puffin (Fratercula arctica) [A204], Herring Gull (Larus argentatus) [A184], Razorbill (Alca torda) [A200], Cormorant (Phalacrocorax carbo) [A017], Fulmar (Fulmarus glacialis) [A009], Greylag Goose (Anser anser) [A043], Shag (Phalacrocorax aristotelis) [A018], Lesser Black-backed Gull (Larus fuscus) [A183], Kiltiwake (Rissa tridactyla) [A188], Guillemot (Uria aalge) [A199]	E01.03, F03.01, G01.01, A03, A04, D03.02	Dispersed habitation, hunting, nautical sports, mowing or cutting of grassland, grazing, shipping lanes
004080	Boyne Estuary SPA	Shelduck (Tadorna tadorna) [A048], Oystercatcher (Haematopus ostralegus) [A130], Golden Plover (Pluvialis apricaria) [A140], Lapwing (Vaneillus vaneilus) [A142], Grey Plover (Pluvialis squatarola) [A141], Wetland and Waterbirds [A999], Little Tern (Sterna albifrons) [A199], Blacktailed Godwit (Limosa limosa) [A156], Sanderling (Calidris alba) [A144], Turnstone (Arenaria interpres) [A169], Knot (Calidris canutus) [A143], Redshank (Tringa totanus) [A162]	F02.03, F01, G02.01, J02.11, I01, G01.02, J02.05, J02.01.02, E01	Leisure fishing, marine and freshwater aquaculture, golf course, siltation rate changes, dumping, depositing of dredged deposits, invasive non-native species, walking, horse riding and non-motorised vehicles, modification of hydrographic functioning, general, reclamation of land from sea, estuary or marsh, urbanised areas, human habitation
004091	Stabannan-Braganstown SPA	Greylag goose (Anser anser) [A043]	A08, A04, D01.02, A01, A02	Fertilisation, grazing, roads, motorways, cultivation, modification of cultivation practices
004102	Garriskil Bog SPA	Greenland White-fronted Goose (Anser albifrons flavirostris) [A395]	D01.04, A04, J02.05.02, J01, A10, B01	Railway lines, TGV, grazing, modifying structures of inland water courses, fire and fire suppression, restructuring agricultural land holding, forest planting on open ground
004113	Howth Head Coast SPA	Kittiwake (Rissa tridactyla) [A188]	J01, G01.02	Fire and fire suppression, walking, horse riding and non-motorised vehicles
004117	Ireland's Eye SPA	Razorbill (Alca torda) [A200], Kittiwake (Rissa tridactyla) [A188], Guillemot (Uria aalge) [A199], Cormorant (Phalacrocorax carbo) [A017], Herring Gull (Larus argentatus) [A184]	F02.03, G01.02	Leisure fishing, walking, horse riding and non-motorised vehicles
004122	Skerries Islands SPA	Cormorant ( <i>Phalacrocorax carbo</i> ) [A017], Light-bellied Brent Goose ( <i>Branta bernicla hrota</i> ) [A046], Herring Gull ( <i>Larus argentatus</i> ) [A184], Turnstone ( <i>Arenaria interpres</i> ) [A169], Purple Sandpiper ( <i>Calidris maritima</i> ) [A148], Shag ( <i>Phalacrocorax aristotelis</i> ) [A018]	G01.02	Walking, horse riding and non-motorised vehicles
004127	Wicklow Head SPA	Black-legged kittiwake (Rissa tridactyla) [A188]	G01.02	Walking, horse riding and non-motorised vehicles
004158	River Nanny Estuary and Shore SPA	Ringed Plover (Charadrius hiaticula) [A137], Knot (Calidris canutus) [A143], Wetland and Waterbirds [A999], Sanderling (Calidris alba) [A144], Herring Gull (Larus argentatus) [A184], Golden Plover (Pluvialis apricaria) [A140], Oystercatcher (Haematopus ostralegus) [A130]	E01.01, G01.02	Continuous urbanisation, Walking, horse riding and non-motorised vehicles
004172	Dalkey Islands SPA	Arctic tern (Sterna paradisaea) [A194], Common tern (Sterna hirundo) [A193], Roseate tern (Sterna dougallii) [A192]	G01.02, E01, G01.01, A04	Walking, horse riding and non-motorised vehicles, urbanised areas, human habitation, nautical sports, grazing
004186	The Murrough SPA	Herring Gull (Larus argentatus) [A184], Red-throated Diver (Gavia stellata) [A001], Wigeon (Anas penelope) [A050], Wetland and Waterbirds [A999], Light-bellied Brent Goose (Branta bernicla hrota) [A046], Greylag Goose (Anser anser) [A043], Teal (Anas crecca) [A052], Little Tern (Sterna albifrons) [A195], Black-headed Gull (Chroicocephalus ridibundus) [A179]	D01.04, A08, G01.02	Railway lines, TGV, fertilisation, walking, horse riding and non-motorised vehicles
004232	River Boyne and River Blackwater SPA	Kingfisher (Alcedo atthis) [A229]	E01.03, J02, X, D01.02, E01	Dispersed habitation, human induced changes in hydraulic conditions, roads, motorways, urbanised areas, human habitation

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
000440	Lough Ree SAC	Alkaline fens [7230], Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110], Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation [3150], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion Incanae, Salicion albae) [91E0], Otter (Lutra lutra) [1355], Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210], Bog woodland [91D0], Limestone pavements [8240]	A03.03, H01.08, F02.03, A04, G01.02, L08, I01, D03.01.02, G01.01, E01.03, A08, G02.09, B02, J02.04, J02.11.02, K03.05, F03.01, H06.03, H02.06	Abandonment or lack of mowing, diffuse pollution to surface waters due to household sewage and waste waters, leisure fishing, grazing, walking, horse-riding and non-motorised vehicles, inundation (natural processes), invasive non-native species, piers or tourist harbours or recreational piers, nautical sports, dispersed habitation, fertilisation, wildlife watching, forest and plantation management & use, flooding modifications, other siltation rate changes, antagonism arising from introduction of species, hunting, thermal heating of water bodies, diffuse groundwater pollution due to agricultural and forestry activities
004064	Lough Ree SPA	Teal (Anas crecca) [A052], Whooper Swan (Cygnus cygnus) [A038], Tufted Duck (Aythya fuligula) [A061], Golden Plover (Pluvialis apricaria) [A140], Goldeneye (Bucephala clangula) [A067], Wetland and Waterbirds [A999], Wigeon (Anas penelope) [A050], Shoveler (Anas clypeata) [A056], Coot (Fulica atra) [A125], Common Scoter (Melanitta nigra) [A065], Common tern (Sterna hirundo) [A193], Mallard (Anas platyrhynchos) [A053], Lapwing (Vanellus vanellus) [A142], Little Grebe (Tachybaptus ruficollis) [A004]	F03.01, F02.03, I01, A04, G01.01, G01.02, B, A08	Hunting, leisure fishing, invasive non-native species, grazing, nautical sports, walking, horse-riding and non-motorised vehicles, sylviculture, forestry, fertilisation
004096	Middle Shannon Callows SPA	Wigeon (Anas penelope) [A050], Black-tailed Godwit (Limosa limosa) [A156], Black-headed Gull (Chroicocephalus ridibundus) [A179], Corncrake (Crex crex) [A122], Wetland and Waterbirds [A999], Golden Plover (Pluvialls apricaria) [A140], Whooper Swan (Cygnus cygnus) [A038], Lapwing (Vanellus vanellus) [A142]	A08, F02.03, D01.01, G01.02, D01.05, A04.03, F03.01, G01.01, A04, A03, E01	Fertilisation, leisure fishing, paths, tracks, cycling tracks, walking, horse-riding and non-motorised vehicles, bridge, viaduct, abandonment of pastoral systems lack of grazing, hunting, nautical sports, grazing, mowing or cutting of grassland, urbanised areas, human habitation
000216	River Shannon Callows SAC	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410], Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis) [6510], Limestone pavements [8240], Alkaline fens [7230], Otter (Lutra Lutra) [1355], Alluvial forest with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]	A07, A04.03, J02.01, A08, C01.03.02, A04.01, A04.02.05, F03.01, A03.03, D01.01, G01, B06, J02.05, J02.11, A10.01, J02.05.02, K03.04, G05.01, A03, B02.02, J02.04.01	Use of biocides, hormones and chemicals, abandonment of pastoral systems lack of grazing, landfill, land reclamation and drying out, general, fertilisation, mechanical removal of peat, intensive grazing, non-intensive mixed animal grazing, hunting, abandonment or lack of mowing, paths, tracks, cycling tracks, outdoor sports and leisure activities, recreational activities, grazing in forests or woodland, modification of hydrographic functioning, general, siltation rate changes, dumping, depositing of dredged deposits, removal of hedges and coppice or scrub, modifying structures of inland water courses, predation, trampling, overuse, mowing or cutting of grassland, forestry clearance, flooding
002241	Lough Derg, North-East Shore SAC	Limestone pavements [8240], Alkaline fens [7230], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Taxus baccata woods of the British Isles [91J0], Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210], Juniperus communis formations on heaths or calcareous grasslands [5130]	K02.03, H01.08, A04.01, D01.01, G01, I01, M01.03, I02, A04.02.05, D03.01.02, M01.02, H01, A08, J02.10, J02.01.03, M01.01, J02, K02.01, C01, B02.01.01, A10.01, G02.09	Eutrophication (natural), diffuse pollution to surface waters due to household sewage and waste waters, intensive grazing, paths, tracks, cycling tracks, outdoor sports and leisure activities, recreational activities, invasive non-native species, flooding and rising precipitations, problematic native species, non-intensive mixed animal grazing, piers or tourist harbours or recreational piers, droughts and less precipitations, pollution to surface waters (limnic & terrestrial, marine & brackish), fertilisation, management of aquatic and bank vegetation for drainage purposes, infilling of ditches, dykes, ponds, pools, marshes or pits, temperature changes (e.g. rise of temperature & extremes), human induced changes in hydraulic conditions, species composition change (succession), mining and quarrying, forest replanting (native trees), removal of hedges and coppice or scrub, wildlife watching
004058	Lough Derg (Shannon) SPA	Wetland and Waterbirds [A999], Tufted Duck (Aythya fuligula) [A061], Cormorant (Phalacrocorax carbo) [A017], Common tern (Sterna hirundo) [A193], Goldeneye (Bucephala clangula) [A067]	F03.01, G01.01, F02.03, A08	Hunting, nautical sports, leisure fishing, fertilisation
002165	Lower River Shannon SAC	Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Estuaries [1130], Freshwater pearl mussel (Margaritifera margaritifera) [1029], Mediterranean salt meadows (Juncetalia maritimi) [1410], Perennial vegetation of stony banks [1220], Atlantic salmon (Salmo salar) [1106], Large shallow inlets and bays [1160], Vegetated sea cliffs of the Atlantic and Baltic coasts [1230], Coastal lagoons [1150], Mudflats and sandflats not covered by seawater at low tide [1140], River lamprey (Lampetra fluviatilis) [1099], Sea lamprey (Petromyzon marinus) [1095], Bottlenose dolphin (Tursiops truncatus) [1349], Sandbanks which are slightly covered by sea water all the time [1110], Reefs [1170], Otter (Lutra lutra) [1355], Salicornia and other annuals colonising mud and sand [1310], Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410], Brook lamprey (Lampetra planeri) [1096], Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260]	E01, A04, C01.01.02, K02.03, G01.01, D01.01, I01, A08, J02.01.02, E03, F01, J02.10, F02.03, F03.01, J02.12.01, C01.03.01, J02.01.01, H04, B	Urbanised areas, human habitation, grazing, removal of beach materials, eutrophication (natural), nautical sports, paths, tracks, cycling tracks, invasive non-native species, fertilisation, reclamation of land from sea, estuary or marsh, discharges, marine and freshwater aquaculture, management of aquatic and bank vegetation for drainage purposes, leisure fishing, hunting, sea defence or coast protection works, tidal barrages, hand cutting of peat, polderisation, air pollution, air-borne pollutants, sylviculture, forestry
004077	River Shannon and River Fergus Estuaries SPA	Bar-tailed Godwit (Limosa Iapponica) [A157], Knot (Calidris canutus) [A143], Black-tailed Godwit (Limosa limosa) [A156], Greenshank (Tringa nebularia) [A164], Redshank (Tringa totanus) [A162], Cormorant (Phalacrocorax carbo) [A017], Whooper Swan (Cygnus cygnus) [A038], Wigeon (Anas penelope) [A050], Curlew (Numenius arquata) [A160], Light-bellied Brent Goose (Branta bernicla hrota) [A046], Dunlin (Calidris alpina) [A149], Ringed Plover (Charadrius hiaticula) [A137], Lapwing (Vanellus vanellus) [A142], Black-headed Gull (Chroicocephalus ridibundus) [A179], Pintail (Anas acuta) [A054], Teal (Anas crecca) [A052], Scaup (Aythya marila) [A062], Shoveler (Anas clypeata) [A056], Golden Plover (Pluvialis apricaria) [A140], Grey Plover (Pluvialis squatarola) [A141], Shelduck (Tadorna tadorna) [A048], Wetland and Waterbirds [A999]	D03.02, G01.01, E02, E03, F01, A08, E01	Shipping lanes, nautical sports, industrial or commercial areas, discharges, marine and freshwater aquaculture, fertilisation, urbanised areas, human habitation

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
002137	Lower River Suir SAC	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430], Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion Incanae, Salicion albae) [91E0], Otter (Lutra lutra) [1355], Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260], White-clawed crayfish (Austropotamobius pallipes) [1092], Atlantic salmon (Salmo salar) [1106], Sea lamprey (Petromyzon marinus) [1095], Twaite shad (Alosa fallax) [1103], Freshwater pearl mussel (Margaritifera margaritifera) [1029], River lamprey (Lampetra fluviatilis) [1099], Brook lamprey (Lampetra planeri) [1096], Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Mediterranean salt meadows (Juncetalia maritimi) [1410], Taxus baccata woods of the British Isles [91J0]	J02.12.02, A01, J02.01.02, I01, H01, D03.01, E03, E01, A08, J02.01, B	Dykes and flooding defence in inland water systems, cultivation, reclamation of land from sea, estuary or marsh, invasive non-native species, pollution to surface waters (Ilmnic & terrestrial, marine & brackish), port areas, discharges, urbanised areas, human habitation, fertilisation, landfill, land reclamation and drying out, silviculture, forestry
004097	River Suck Callows SPA	Greenland White-fronted Goose (Anser albifrons flavirostris) [A395], Lapwing (Vanellus vanellus) [A142], Wetland and Waterbirds [A999], Whooper Swan (Cygnus cygnus) [A038], Wigeon (Anas penelope) [A050], Golden Plover (Pluvialis apricaria) [A140]	A04, F02.03, G01.01, B, E01.03, A08, A03, F03.01	Grazing, leisure fishing, nautical sports, silviculture, forestry, dispersed habitation, fertilisation, mowing or cutting of grassland, hunting
004076	Wexford Harbour and Slobs SPA	European golden plover (Pluvialis apricaria) [A140], Greater White-Fronted Goose (Anser albifrons flavirostris) [A395], Mew gull (Larus canus) [A182], Red knot (Caildris canutus) [A143], Tufted duck (Aythya fuligula) [A061], Red-breasted merganser (Mergus serrator) [A069], Northern shoveler (Anas clypeata) [A056], Great cormorant (Phalacrocorax carbo) [A017], Little tern (Sterna albifrons) [A195], Short-eared owl (Asio flammeus) [A222], Great crested grebe (Podiceps cristatus) [A005], Ruff (Philomachus pugnax) [A151], Cormorant (Phalacrocorax carbo) [A017], Eurasian teal (Anas crecca) [A052], Northern lapwing (Vanellus vanellus) [A142], Common shelduck (Tadorna tadorna) [A048], Hen harrier (Circus cyaneus) [A082], Black-headed gull (Chroicocephalus ridibundus) [A179], Northern pintail (Anas acuta) [A054], Common greenshank (Tringa nebularia) [A164], Black-headed gull (Larus ridibundus) [A179], Eurasian wigeon (Anas penelope) [A050], Bar-tailed godwit (Limosa lapponica) [A157], Wetland and Waterbirds [A999], Brent Goose (Light-bellied) (Branta bernicla hrota) [A046], Sanderling (Calidris alba) [A144], Gadwall (Anas strepera) [A051], Common coot (Fulica atra) [A125], Eurasian coot (Fulica atra) [A125], Common goldeneye (Bucephala clangula) [A067], Lesser black-backed gull (Larus fuscus) [A133], Bewick's Swan (Cygnus columbianus bewickii) [A037], Mallard (Anas platyrhynchos) [A053], Grey Heron (Ardea cinerea) [A028], Eurasian overcatcher (Haematopus ostralegus) [A130], Eurasian curlew (Numenius arquata) [A160], Greater scaup (Aythya marila) [A062], Common pochard (Aythya ferina) [A059], Little egret (Egretta garzetta) [A026], Common redshank (Tringa totanus) [A156], Black-tailed qodwit (Limosa limosa) [A156], Greenland white-fronted goose (Anser ablifrons flavirostris) [A395], Nood sandpiper (Tringa glareola) [A166], Ringed plover (Charadrius hiaticula) [A137], Ruddy turnstone (Arenaria interpres) [A169], Grey plover (Charadrius hiaticula) [A137], Ruddy turnstone (Arenaria interpres) [A169], Grey plover (Pluvialis	A01, F03.01, A04, B, A08, G01.02, D01.02, G03, F01, E01, J02.12, J02.01.01	Cultivation, hunting, grazing, sylviculture, forestry, fertilisation, walking, horse-riding and non-motorised vehicles, roads, motorways, interpretative centres, marine and freshwater aquaculture, urbanised areas, human habitation, dykes, embankments, artificial beaches, polderisation
004019	The Raven SPA	Ringed plover (Charadrius hiaticula) [A137], Black-headed gull (Larus ridibundus) [A179], Eurasian wigeon (Anas penelope) [A050], Little tern (Sterna albifrons) [A195], Bar-tailed godwit (Limosa lapponica) [A157], Common shelduck (Tadorna tadorna) [A048], Great northern diver (Gavia immer) [A003], Eurasian oystercatcher (Haematopus ostralegus) [A130], Greenland white-fronted goose (Anser albifrons flavirostris) [A395], Sanderling (Calidris alba) [A144], Mew gull (Larus canus) [A182], Red knot (Calidris canutus) [A143], Wetland and Waterbirds [A999], Eurasian curlew (Numenius arquata) [A160], Grey plover (Pluvialis aquatarola) [A141], European golden plover (Pluvialis apricaria) [A140], Northern lapwing (Vanellus vanellus) [A142], Slavonian grebe (Podiceps auritus) [A007], Great crested grebe (Podiceps cristatus) [A005], Mallard (Anas platyrhynchos) [A053], Red-throated diver (Gavia stellata) [A001], Black (common) scoter (Melanitta nigra) [A066], Great cormorant (Phalacrocorax carbo) [A017], Red-breasted merganser (Mergus serrator) [A069]	B, G01.01, G01.02	Silviculture, forestry, nautical sports, walking, horse-riding and non-motorised vehicles
004046	Lough Iron SPA	Golden Plover (Pluvialis apricaria) [A140], Wigeon (Anas penelope) [A050], Shoveler (Anas clypeata) [A056], Coot (Fulica atra) [A125], Wetland and Waterbirds [A999], Greenland Whitefronted Goose (Anser albifrons flavirostris) [A395], Teal (Anas crecca) [A052], Whooper Swan (Cygnus cygnus) [A038]	A08, A04, B	Fertilisation, Grazing, Sylviculture, forestry

# Appendix II Qualifying Interests of SACs that have undergone assessment

List of Qualifying Interests considered by the assessment, including summaries of the current threats and sensitivities to each Qualifying Interest

Qualifying Interests	EU Code	Current threats to Qualifying Interests	Sensitivity of Qualifying Interests
Geyer's Whorl Snail (Vertigo geyeri)	[1013]	Loss of riverside and canal side habitat; exploitation of esker sites and drainage of wetlands, and sheep grazing and overexploitation of dune sites.	Changes to ground vegetation condition, groundwater dependent and is highly sensitive to hydrological changes.
Narrow-mouthed Whorl Snail (Vertigo angustior)	[1014]	Loss of riverside and canal side habitat; exploitation of esker sites and drainage of wetlands, and sheep grazing and overexploitation of dune sites.	Changes to ground vegetation condition, groundwater dependent and is highly sensitive to hydrological changes.
Desmoulin's Whorl Snail (Vertigo moulinsiana)	[1016]	Loss of riverside and canal side habitat; exploitation of esker sites and drainage of wetlands, and sheep grazing and overexploitation of dune sites.	Changes to ground vegetation condition, groundwater dependent and is highly sensitive to hydrological changes.
Freshwater Pearl Mussel (Margaritifera margaritifera)	[1029]	In stream works, hydrological and morphological alterations, sediment and enrichment, pollution due urbanisation etc. Poor substrate quality due to increased growth of algal and macrophyte vegetation as a result of severe nutrient enrichment, as well as physical siltation.	Surface water dependent. Highly sensitive to hydrological change. Very highly sensitive to pollution.
Marsh Fritillary (Euphydryas aurinia)	[1065]	Declines in habitat quality led to species decline.	Habitat management; land use change and drainage.
White-clawed Crayfish (Austropotamobius pallipes)	[1092]	Poor substrate quality due to increased growth of algal and macrophyte vegetation as a result of severe nutrient enrichment, as well as physical siltation.	Invasive species, disease, surface water dependent. Highly sensitive to hydrological change. Very highly sensitive to pollution.
Sea Lamprey (Petromyzon marinus)	[1095]	Barriers to upstream migration (e.g., weirs), which limit access to spawning beds and juvenile habitat are main threats to this species.	Marine water dependent. Low sensitivity to hydrological changes. Coastal development, trampling from recreational activity.
Brook Lamprey (Lampetra planeri)	[1096]	Channel maintenance, barriers, passage obstruction, gross pollution and specific pollutants.	Surface water dependent Highly sensitive to hydrological change.
River Lamprey (Lampetra fluviatilis)	[1099]	Channel maintenance, barriers, passage obstruction, gross pollution and specific pollutants.	Surface water dependent Highly sensitive to hydrological change.
Twaite Shad (Alosa fallax fallax)	[1103]	Habitat quality, particularly at spawning sites is the most notable threat to this species.	Changes in management. Changes in nutrient or base status. Moderately sensitive to hydrological change.
Salmon (Salmo salar)	[1106]	Marine survival rates are of concern for the populations.	Disease, parasites and barriers to movement.
Estuaries	[1130]	Pollution, fishing /aquaculture and habitat quality.	Inappropriate development, changes in turbidity
Mudflats and sandflats not covered by seawater at low tide	[1140]	Aquaculture, fishing, bait digging, removal of fauna, reclamation of land, coastal protection works and invasive species, particularly cord-grass; hard coastal defence structures; sea-level rise.	Surface and marine water dependent. Moderately sensitive to hydrological change.  Moderate sensitivity to pollution. Changes to salinity and tidal regime. Coastal development.
Reefs	[1170]	Professional fishing; taking for fauna; taking for flora; water pollution; climate change; and change in species composition.	Sensitive to disturbance and pollution.
Annual vegetation of drift lines	[1210]	Grazing; sand and gravel extraction; recreational activities; coastal protection works.	Overgrazing and erosion. Changes in management.
Perennial vegetation of stony banks	[1220]	Disruption of the sediment supply, owing to the interruption of the coastal processes, caused by developments such as car parks and coastal defence structures including rock armour and sea walls. The removal of gravel.	Marine water dependent. Low sensitivity to hydrological changes. Coastal development, trampling from recreational activity and gravel removal.
Vegetated sea cliffs of the Atlantic and Baltic coasts	[1230]	A number of significant pressures were identified, including trampling by walkers, invasive non-native species, gravel extraction, and sea-level and wave exposure changes due to climate change. There have been no significant losses in sea cliff habitat since the Directive came into force.	Land use activities such as tourism and/or agricultural practices. Direct alteration to the habitat or effects such as burning or drainage.
Salicornia and other annuals colonising mud and sand	[1310]	Invasive Species; erosion and accretion.	Marine water dependent. Medium sensitivity to hydrological change. Changes in salinity and tidal regime. Infilling, reclamation, invasive species.
Atlantic salt meadows (Glauco- Puccinellietalia maritimae)	[1330]	Overgrazing; erosion; invasive species, particularly common cordgrass (Spartina anglica); infilling and reclamation.	Marine and groundwater dependent. Medium sensitivity to hydrological change. Changes in salinity and tidal regime. Overgrazing, erosion and accretion.
Harbour Porpoise (Phocoena phocoena)	[1351]	Pressures acting on the species in Irish waters mainly involve commercial vessel-based activities such as impacts arising from geophysical seismic exploration or from local/regional prey removal from fisheries.	Sensitive to disturbance, prey availability and pollution.
Otter (Lutra lutra)	[1355]	Decrease in water quality: Use of pesticides; fertilization; vegetation removal; professional fishing (including lobster pots and fyke nets); hunting; poisoning; sand and gravel extraction; mechanical removal of peat; urbanised areas; human habitation; continuous urbanization; drainage; management of aquatic and bank vegetation for drainage purposes; and canalization or modifying structures of inland water course.	Surface and marine water dependent. Moderately sensitive to hydrological change. Sensitivity to pollution.
Grey Seal (Halichoerus grypus)	[1364]	Distance to human activities, accidental entanglement in fishing gear competition for prey resources, illegal killing, pollution and habitat degradation.	Prey availability, reduction in available habitat and water quality.
Harbour Seal (Phoca vitulina)	[1365]	Flooding and rising precipitations, urbanised areas, human habitation, diffuse pollution to surface waters due to household sewage and waste waters, leisure fishing, flooding modifications,	Changes in habitat, food resources, human waste from built environment and fisheries, noise and fisheries industries.
Petalwort (Petalophyllum ralfsii)	[1395]	There are no significant impacts affecting this species.	None identified.
Mediterranean salt meadows (Juncetalia maritimi)	[1410]	Over-grazing by cattle or sheep; infilling and reclamation.	Marine and groundwater dependent. Medium sensitivity to hydrological change. Changes in salinity and tidal regime. Coastal development and reclamation.
Killarney Fern (Trichomanes speciosum)	[1421]	Threatened by habitat loss, deliberate collection, encroachment of invasive or vigorous species, or indirectly by water pollution, removal of woodland or alteration of watercourses.	Land use management and direct impacts.
River Nore Freshwater Pearl Mussel (Margaritifera durrovensis)	[1990]	In stream works, hydrological and morphological alterations, sediment and enrichment, pollution due urbanisation etc.  Poor substrate quality due to increased growth of algal and macrophyte vegetation as a result of severe nutrient enrichment, as well as physical siltation.	Surface water dependent. Highly sensitive to hydrological change. Very highly sensitive to pollution.
Embryonic shifting dunes	[2110]	Natural erosion processes exacerbated by recreation and sand extraction. Coastal protection interfering with natural processes.	Overgrazing, and erosion. Changes in management.
AL 1811 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	[2120]	Recreation and coastal defences, which may interfere with local sediment dynamics.	Overgrazing, and erosion. Changes in management.
Shifting dunes along the shoreline with white dunes (Ammophila arenaria)	[=,		

		Appropriate Assessment of the Draft Transport Strategy for the Greater Dubli	11711 CG 2022 2012
Qualifying Interests	EU Code	Current threats to Qualifying Interests	Sensitivity of Qualifying Interests
Atlantic decalcified fixed dunes (Calluno- Ulicetea)	[2150]	Agricultural intensification, fertilisation, recreation	Trampling, fragmentation, pollution
Dunes with willow scrub (Salix repens ssp. argentea and Salicion arenariae)	[2170]	Agricultural improvement; overgrazing and inappropriate grazing; forestry; recreational activity.	Overgrazing, and erosion. Changes in management.
Humid dune slacks	[2190]	Agricultural improvement; overgrazing and inappropriate grazing; forestry; recreational activity.	Overgrazing, and erosion. Changes in management. Sensitive to hydrological change.
Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	[3110]	Nutrient enrichment; afforestation; waste water; invasive alien species; sport and leisure activities.	Surface and groundwater dependant. Highly sensitive to hydrological changes. Highly sensitive to pollution.
Hard oligo-mesotrophic waters with benthic vegetation of muskgrass (Chara spp.)	[3140]	Hydrological changes, afforestation; waste water; invasive alien species; sport and leisure activities.	Surface and groundwater dependant. Highly sensitive to hydrological changes. Highly sensitive to pollution.
Natural dystrophic lakes and ponds	[3160]	Nutrient alterations; management shifts in the associated peatland habitat, afforestation; waste water; invasive alien species; sport and leisure activities.	Surface and groundwater dependant. Highly sensitive to hydrological changes. Highly sensitive to pollution
Water courses of plain to montane levels with vegetation (Ranunculion fluitantis and Callitricho-Batrachion)	[3260]	Hydrological and morphological changes, water quality, enrichment, and surface water discharges from industrial site and/or agriculture.	Surface water dependent Highly sensitive to hydrological change and direct physical interactions.
Northern Atlantic wet heaths with Erica tetralix	[4010]	Reclamation, afforestation and burning; overstocking; invasion by non-heath species; exposure of peat to severe erosion.	Surface and groundwater dependent. Highly sensitive to hydrological changes. Inappropriate management.
European dry heaths	[4030]	Afforestation, over burning, over-grazing, under-grazing and bracken invasion.	Moderately sensitive to hydrological change. Changes in management. Changes in nutrient status.
Alpine and Boreal heaths	[4060]	Abandonment; overgrazing; burning; outdoor recreation; quarries; communication networks; and wind farm developments.	Changes in management. Changes in nutrient or base status. Moderately sensitive to hydrological change.
Calaminarian grasslands of the Murawy galmanowa (Violetalia calaminariae)	[6130]	Land reclamation, afforestation; drainage; and infrastructural development.	Surface and groundwater dependent. Highly sensitive to hydrological changes. Inappropriate management.
Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco- Brometalia)* important orchid sites	[6210]	Land reclamation, afforestation; drainage, infrastructural development, succession and agricultural intensification.	Changes in management such as grazing regime. Changes in nutrient or base status. Changes to vegetation composition. Introduction of alien species.
Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe)	[6230]	Bracken encroachment, succession, inappropriate grazing, afforestation; drainage; and infrastructural development.	Erosion, overgrazing and recreation.
Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	[6410]	Agricultural intensification; drainage; abandonment of pastoral systems.	Surface and groundwater dependent. Moderately sensitive to hydrological change. Changes in management. Changes in nutrient status.
Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	[6430]	Agricultural intensification; drainage; abandonment of pastoral systems.	Surface and groundwater dependent. Moderately sensitive to hydrological change. Changes in management. Changes in nutrient status.
Active raised bogs	[7110]	Drainage; burning; peat extraction; overgrazing; afforestation; erosion; and climate change.	Surface and groundwater dependent. Low sensitivity to hydrological changes. Erosion, land- use changes.
Degraded raised bogs still capable of natural regeneration	[7120]	Drainage; burning; peat extraction; overgrazing; afforestation; erosion; and climate change.	Surface and groundwater dependent. Low sensitivity to hydrological changes. Erosion, land- use changes.
Blanket bogs (* if active bog)	[7130]	Land reclamation, peat extraction; afforestation; erosion and landslides triggered by human activity; drainage; burning and infrastructural development.	Surface and groundwater dependent. Highly sensitive to hydrological changes. Inappropriate management.
Transition mires and quaking bogs	[7140]	Drainage; burning; peat extraction; overgrazing; afforestation; erosion; and climate change.	Surface and groundwater dependent. Low sensitivity to hydrological changes. Erosion, landuse changes.
Depressions on peat substrates of the Rhynchosporion	[7150]	Drainage; burning; peat extraction; overgrazing; afforestation; erosion; and climate change.	Surface and groundwater dependent. Low sensitivity to hydrological changes. Erosion, land- use changes.
Calcareous fens with species of mariscus sedge and bog cotton (Cladium mariscus and Caricion davallianae)	[7210]	Hydrological changes, pollution to surface waters, urbanisation, roads development, groundwater interactions, grazing and cultivation practices and the inappropriate use of pesticides.	Surface and groundwater dependent. Highly sensitive to hydrological changes. Inappropriate management.
Petrifying springs with tufa formation (Cratoneurion)	[7220]	Ground water interactions, on site management activities.	Surface and groundwater dependant. Highly sensitive to hydrological changes. Highly sensitive to pollution.
Alkaline fens	[7230]	Land reclamation, peat extraction; afforestation; erosion and landslides triggered by human activity; drainage; burning and infrastructural development.	Surface and groundwater dependent. Highly sensitive to hydrological changes. Inappropriate management.
Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)	[8110]	Overgrazing, under grazing and succession were recorded as medium-importance pressures in this reporting period, and Structure and functions were again assessed as Inadequate, the trend is considered to be stable rather than improving. This change is due to improved knowledge and the habitat is considered to have been stable since before the last assessment.	Erosion, overgrazing and recreation.
Calcareous rocky slopes with chasmophytic vegetation	[8210]	Overgrazing; extractive industries; recreational activities and improved access.	Erosion, overgrazing and recreation.
Siliceous rocky slopes with chasmophytic vegetation	[8220]	Pressures associated with the non-native invasive species New Zealand willowherb ( <i>Epilobium brunnescens</i> ).	Erosion, overgrazing and recreation.
Old sessile oak woods with Ilex and Blechnum in the British Isles	[91A0]	The introduction of alien species; sub-optimal grazing patterns; general forestry management; increases in urbanisation and human habitation adjacent to oak woodlands; and the construction of communication networks through the woodland.	Changes in management. Changes in nutrient or base status. Introduction of alien species.
Sandbanks which are slightly covered by sea water all the time	[1110]	Discharges, marine and freshwater aquaculture, nautical sports sea defence or coast protection works	Marine water dependant, intertidal changes, sediment changes, marine pollution.

Qualifying Interests	EU Code	Current threats to Qualifying Interests	Sensitivity of Qualifying Interests
Coastal lagoons	[1150]	Mixed source marine water pollution (marine and coastal); modification of hydrological flow; drainage; abiotic natural processes (e.g. erosion, silting up, drying out, submersion, salinization; accumulation of organic material; extraction activities generating marine pollution; sea-level and wave exposure changes due to climate change.	Surface and groundwater dependent. Highly sensitive to hydrological changes. Inappropriate management.
Large shallow inlets and bays	[1160]	Pressures on the habitat include nutrient enrichment, dredging and invasive alien species. Overall Status is assessed as Bad and deteriorating, a genuine decline since the 2013 assessment of Inadequate and improving, and is based on more detailed information.	Inappropriate development, changes in turbidity, surface water runoff, discharge etc. On site management activities.
Juniperus communis formations on heaths or calcareous grasslands	[5130]	Overgrazing, erosion, scrub clearance, inappropriate land use management, and succession processes.	Changes in management. Changes in nutrient or base status. Changes to vegetation composition. Introduction of alien species.
Tursiops truncatus	[1349]	Shipping lanes, disposal of household or recreational facility waste, fishing and harvesting aquatic resources, marine water pollution, discharges, noise nuisance, noise pollution	Noise and human disturbance, marine pollution, marine and fisheries waste
Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation	[3150]	Hydrological changes, afforestation; waste water; invasive alien species; sport and leisure activities.	Surface and groundwater dependant. Highly sensitive to hydrological changes. Highly sensitive to pollution.
Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)	[6510]	Agricultural intensification; drainage; abandonment of pastoral systems.	Changes in management such as grazing regime. Changes in nutrient or base status.  Changes to vegetation composition. Introduction of alien species.
Limestone pavements	[8240]	Overgrazing; extractive industries; recreational activities and improved access.	Erosion, overgrazing and recreation.
Bog woodland	[91D0]	The introduction of alien species; sub-optimal grazing patterns; general forestry management; increases in urbanisation and human habitation adjacent to oak woodlands; and the construction of communication networks through the woodland.	Changes in management. Changes in nutrient or base status. Introduction of alien species.
Taxus baccata woods of the British Isles	[91J0]	Invasive Species; erosion and accretion.	Changes in management. Changes in nutrient or base status. Introduction of alien species.

# Appendix III Special Conservation Interests of SPAs that have undergone assessment

List of all Special Conservation Interest species of SPAs that have undergone assessment, including vulnerabilities

Special Conservation Interests
Red-throated diver (Gavia stellata) [A001]
Great crested grebe (Podiceps cristatus) [A005]
lorthern fulmar (Fulmarus glacialis) [A009]
Great cormorant (Phalacrocorax carbo) [A017]
undra swan (Cygnus columbianus bewickii) [A037]
uropean shag ( <i>Phalacrocorax aristotelis</i> ) [A018]
Vhooper swan (Cygnus cygnus) [A038]
Greylag goose (Anser anser) [A043]
Greylag goose (Anser anser [Iceland/UK/Ireland]) [A043]
Common shelduck (Tadorna tadorna) [A048]
urasian wigeon <i>(Anas penelope)</i> [A050]
curasian teal <i>(Anas crecca)</i> [A052]
Aallard <i>(Anas platyrhynchos)</i> [A053]
lorthern pintail <i>(Anas acuta)</i> [A054]
lorthern shoveler (Anas clypeata) [A056]
Common pochard (Aythya ferina) [A059]
Greater scaup (Aythya marila) [A062]
ufted duck <i>(Aythya fuligula)</i> [A061]
Black <i>(common)</i> scoter <i>(Melanitta nigra)</i> [A065]
Common goldeneye (Bucephala clangula) [A067]
Red-breasted merganser (Mergus serrator) [A069]
len harrier (Circus cyaneus) [A082]
flerlin <i>(Falco columbarius)</i> [A098]
Peregrine falcon (Falco peregrinus) [A103]
Corn crake (Crex crex) [A122]
Common coot (Fulica atra) [A125]
urasian oystercatcher (Haematopus ostralegus) [A130]
Ringed plover (Charadrius hiaticula) [A137]
uropean golden plover ( <i>Pluvialis apricaria</i> ) [A140]
Grey plover (Pluvialis squatarola) [A141]
lorthern lapwing (Vanellus vanellus) [A142]
Red knot (Calidris canutus) [A143]
sanderling <i>(Calidris alba)</i> [A144]
Purple sandpiper (Calidris maritima) [A148]
Bar-tailed godwit <i>(Limosa lapponica)</i> [A157]
urasian curlew <i>(Numenius arquata)</i> [A160]
Common redshank (Tringa totanus) [A162]
Common greenshank (Tringa nebularia) [A164]
Ruddy turnstone (Arenaria interpres) [A169]
Black-headed gull (Larus ridibundus) [A179]
New gull <i>(Larus canus)</i> [A182]
esser black-backed gull (Larus fuscus) [A183]
Herring gull (Larus argentatus) [A184]
Black-legged kittiwake (Rissa tridactyla) [A188]
Roseate tern (Sterna dougallii) [A192]
Common tern (Sterna hirundo) [A193]
vrctic tern (Sterna paradisaea) [A194]
ittle tern (Sterna albifrons) [A195]
Common guillemot (Uria aalge) [A199]
Razorbill <i>(Alca torda)</i> [A200]
ktlantic puffin <i>(Fratercula arctica)</i> [A204]
Greenland white-fronted goose (Anser albifrons flavirostris) [A395]

#### **Vulnerabilities of Special Conservation Interests**

- Bird species are particularly vulnerable to direct disturbance due to noise and/or vibration. These effects are localised, and disturbance effects are foreseen to be low at distances beyond 2km<sup>52</sup>.
- Direct habitat loss is a serious concern for bird species, as well as the reduction in habitat quality. Habitat degradation could occur through effects such as local enrichment due to agricultural practices or damage to habitat through activities such as trampling.
- Prey species diversity and availability is a key element of species conservation. Community dynamics and ecosystem functionality are complex concepts and require site specific information. The site synopsis and conservation objectives for the SPAs identified within the ZOI were used to identify any specific prey sensitivities.
- Availability of nesting/roosting habitat. Particularly for the Hen Harrier.
- Vegetation composition, structure and functionality.

Wetland and Waterbirds [A999] Direct land take is a common vulnerability to all sites; as well as significant water quality effects. The conservation objective of all SPAs designated for Wetland and Waterbirds is to maintain the favourable conservation condition of the wetland habitat as a resource for the regularly occurring migratory waterbirds using it.

<sup>52</sup> SNH (2007) A Review of Disturbance Distances in Selected Bird Species: Scottish Natural Heritage; M. Ruddock & D.P. Whitfield

# Appendix IV Relationship with Other Plans, Programmes, Projects

This appendix is not intended to be a full and comprehensive review of EU Directives, the transposing regulations or the regulatory framework for environmental protection and management. The information is not exhaustive and it is recommended to consult the Directive, Regulation, Plan or Programme to become familiar with the full details of each.

Legislation, Plan, etc.	Sun	nmary of high-level aim/ purpose/ objective	Sun	nmary of lower level objectives, actions etc.	Relevance to the Strategy
International/European Level					
SEA Directive (2001/42/EC)	•	Contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development. Provide for a high level of protection of the environment by carrying out an environmental assessment of plans and programmes which are likely to have significant effects on the environment.		Carry out and environmental assessment for plans or programmes referred to in Articles 2 to 4 of the Directive. Prepare an environmental report which identifies, describes and evaluates the likely significant effects on the environment of implementing the plan or programme and reasonable alternatives that consider the objectives and the geographical scope of the plan or programme. Consult with relevant authorities, stakeholders and public allowing sufficient time to make a submission.  Consult other Member States where the implementation of a plan or programme is likely to have transboundary environmental effects.  Inform relevant authorities and stakeholders on the decision to implement the plan or programme.  Issue a statement to include requirements detailed in Article 9 of the Directive.  Monitor and mitigate significant environmental effects identified by the assessment.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EIA Directive (2011/92/EU as amended by 2014/52/EU)	•	Requires the assessment of the environmental effects of public and private projects which are likely to have significant effects on the environment. Aims to assess and implement avoidance or mitigation measures to eliminate environmental effects, before consent is given of projects likely to have significant effects on the environment by virtue, inter alia, of their nature, size or location are made subject to a requirement for development consent and an assessment with regard to their effects. Those projects are defined in Article 4.	•	All projects listed in Annex I are considered as having significant effects on the environment and require an EIA.  For projects listed in Annex II, a "screening procedure" is required to determine the effects of projects on the basis of thresholds/criteria or a case by case examination. This should take into account Annex III.  The environmental impact assessment shall identify, describe and assess in an appropriate manner, in the light of each individual case and in accordance with Articles 4 to 12, the direct and indirect effects of a project on the following factors: human beings, fauna and flora, soil, water, air, climate and the landscape, material assets and the cultural heritage, the interaction between each factor.  Consult with relevant authorities, stakeholders and public allowing sufficient time to make a submission before a decision is made.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Habitats Directive (92/43/EEC)		Promote the preservation, protection and improvement of the quality of the environment, including the conservation of natural habitats and of wild fauna and flora.  Contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora.  Maintain or restore to favourable conservation status, natural habitats and species of wild fauna and flora of community interest.  Promote the maintenance of biodiversity, taking account of economic, social, cultural and regional requirements.	:	Propose and protect sites of importance to habitats, plant and animal species. Establish a network of European sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex II, to enable the natural habitat types and the species' habitats concerned to be maintained or, where appropriate, restored at a favourable conservation status in their natural range. Carry out comprehensive assessment of habitat types and species present. Establish a system of strict protection for the animal species and plant species listed in Annex IV.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Birds Directive (2009/147/EC)	•	Conserve all species of naturally occurring birds in the wild state including their eggs, nests and habitats.  Protect, manage and control these species and comply with regulations relating to their exploitation.  The species included in Annex I shall be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution.	•	Preserve, maintain or re-establish a sufficient diversity and area of habitats for all the species of birds referred to in Annex 1.  Preserve, maintain and establish biotopes and habitats to include the creation of protected areas (Special Protection Areas).  Ensure the upkeep and management in accordance with the ecological needs of habitats inside and outside the protected zones, re-establish destroyed biotopes and creation of biotopes.  Measures for regularly occurring migratory species not listed in Annex I is required as regards their breeding, moulting and wintering areas and staging posts along their migration routes. The protection of wetlands and particularly wetlands of international importance.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Nitrates Directive (91/676/EC)	•	Reducing water pollution caused or induced by nitrates from agricultural sources and – preventing further such pollution.	grou	and's Nitrates Action Programme is designed to prevent pollution of surface waters and und water from agricultural sources and to protect and improve water quality. Ireland's d NAP came into operation in 2014. Each Member State's NAP must include: a limit on the amount of livestock manure applied to the land each year set periods when land spreading is prohibited due to risk set capacity levels for the storage of livestock manure	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Strategy
			framework for environmental protection and management.
EU Integrated Pollution Prevention Control Directive (2008/1/EC)	The purpose of this Directive is to achieve integrated prevention and control of pollution arising from the activities listed in Annex I. It lays down measures designed to prevent or, where that is not practicable, to reduce emissions in the air, water and land from the abovementioned activities, including measures concerning waste, in order to achieve a high level of protection of the environment taken as a whole, without prejudice to Directive 85/337/EEC and other relevant Community provisions.	The IPPC Directive is based on several principles:	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Plant Protection (products) Directive 2009/127/EC	<ul> <li>The Directive aims at reducing the risks and impacts of pesticide use on human health and</li> <li>the environment by introducing different targets, tools and measures such as Integrated Pest</li> <li>Management (IPM) or National Action Plans (NAPs).</li> </ul>	The Framework Directive applies to pesticides which are plant protection products. Regarding pesticide application equipment already in professional use, the Framework Directive introduces requirements for the inspection and maintenance to be carried out on such equipment.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Renewables Directive (2009/28/EC)	<ul> <li>The Renewable Energy Directive establishes an overall policy for the production and promotion of energy from renewable sources in the EU.</li> <li>It requires the EU to fulfil at least 20% of its total energy needs with renewables by 2020 – to be achieved through the attainment of individual national targets.</li> <li>All EU countries must also ensure that at least 10% of their transport fuels come from renewable sources by 2020.</li> </ul>	The Directive promotes cooperation amongst EU countries (and with countries outside the EU) to help them meet their renewable energy targets. The Directive specifies national renewable energy targets for each country, taking into account its starting point and overall potential for renewables.  EU countries set out how they plan to meet these targets and the general course of their renewable energy policy in national renewable energy action plans. Progress towards national targets is measured every two years when EU countries publish national renewable energy progress reports.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Indirect Land Use Change Directive (2012/0288 (COD))	Article 3(4) of Directive 2009/28/EC of the European Parliament and of the Council (3) requires Member States to ensure that the share of energy from renewable energy sources in all forms of transport in 2020 is at least 10 % of their final energy consumption.  The blending of biofuels is one of the methods available for Member States to meet this target, and is expected to be the main contributor.  Other methods available to meet the target are the reduction of energy consumption, which is imperative because a mandatory percentage target for energy from renewable sources is likely to become increasingly difficult to achieve sustainably if overall demand for energy for transport continues to rise, and the use of electricity from renewable energy sources.	Limit the contribution that conventional biofuels (with a risk of ILUC emissions) make towards attainment of the targets in the Renewable Energy Directive; Improve the greenhouse gas performance of biofuel production processes (reducing associated emissions) by raising the greenhouse gas saving threshold for new installations subject to protecting installations already in operation on 1 <sup>st</sup> July 2014; Encourage a greater market penetration of advanced (low-ILUC) biofuels by allowing such fuels to contribute more to the targets in the Renewable Energy Directive than conventional biofuels; Improve the reporting of greenhouse gas emissions by obliging Member States and fuel suppliers to report the estimated indirect land-use change emissions of biofuels.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Alternative Fuels Infrastructure Directive (2014/94/EU)	<ul> <li>This Directive establishes a common framework of measures for the deployment of alternative fuels infrastructure in the Union in order to minimise dependence on oil and to mitigate the environmental impact of transport.</li> </ul>	This Directive sets out minimum requirements for the building-up of alternative fuels infrastructure, including recharging points for electric vehicles and refuelling points for natural gas (LNG and CNG) and hydrogen, to be implemented by means of Member States' national policy frameworks, as well as common technical specifications for such recharging and refuelling points, and user information requirements.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Energy Efficiency Directive (2012/27/EU)	<ul> <li>Establishes a set of binding measures to help the EU reach its 20% energy efficiency target by 2020.</li> <li>Under the Directive, all EU countries are required to use energy more efficiently at all stages of the energy chain, from production to final consumption.</li> </ul>	Energy distributors or retail energy sales companies have to achieve 1.5% energy savings per year through the implementation of energy efficiency measures     EU countries can opt to achieve the same level of savings through other means, such as improving the efficiency of heating systems, installing double glazed windows or insulating roofs     The public sector in EU countries should purchase energy efficient buildings, products and services     Every year, governments in EU countries must carry out energy efficient renovations on at least 3% (by floor area) of the buildings they own and occupy	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Strategy
and the state of t	Daniel Johnson Communication of the Communication o	Energy consumers should be empowered to better manage consumption. This includes easy and free access to data on consumption through individual metering	framework for environmental protection and management.
		National incentives for SMEs to undergo energy audits     Large companies will make audits of their energy consumption to help them identify ways to reduce it     Monitoring efficiency levels in new energy generation capacities.	
EU Seveso Directive (2012/18/EU)	This Directive lays down rules for the prevention of major accidents which involve dangerous substances, and the limitation of their consequences for human health and the environment, with a view to ensuring a high level of protection throughout the Union in a consistent and effective manner.	The Seveso Directive is well integrated with other EU policies, thus avoiding double regulation or other administrative burden. This includes the following related policy areas:	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Union Biodiversity Strategy to 2020	Aims to halt or reverse biodiversity loss and speed up the EU's transition towards a resource efficient and green economy.     Halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, and restoring them in so far as feasible.	Outlines six targets and twenty actions to aid European Union in halting the loss to biodiversity and eco-system services.     The six targets cover:	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Green Infrastructure Strategy	Aims to create a robust enabling framework in order to promote and facilitate Green Infrastructure (GI) projects.	Promoting GI in the main EU policy areas. Supporting EU-level GI projects. Improving access to finance for GI projects. Improving information and promoting innovation.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
UNESCO (1972) The Convention for the Protection of the World Cultural and Natural Heritage	links concepts of nature conservation and the preservation of cultural properties; and     recognizes the way in which people interact with nature, and the fundamental need to preserve the balance between the two.	sets out the duties of States Parties in identifying potential sites and their role in protecting and preserving them;     each country pledges to conserve not only the World Heritage sites situated on its territory, but also to protect its national heritage;     encourages to integrate the protection of the cultural and natural heritage into regional planning programmes, set up staff and services at their sites, undertake scientific and technical conservation research and adopt measures which give this heritage a function in the day-to-day life of the community.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
UN (1992) The Convention on Biological Diversity	An overall objective is to develop national strategies for the conservation and sustainable use of biological diversity.	The Convention has three main goals:  the conservation of biological diversity (or biodiversity);  the sustainable use of its components; and  the fair and equitable sharing of benefits arising from genetic resources.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
UN (1992) Framework Convention on Climate Change	It is aimed at stabilising greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.	The Convention acknowledges the vulnerability of all countries to the effects of climate change and calls for special efforts to ease the consequences, especially in developing countries which lack the resources to do so on their own.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and

Lamidation Discussion	Commence of blink level aim of a blinking	Company of the state of the sta	Delevered to the Charterin
Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Strategy
UNI Keets Day L Cord V	The IIII Keeps Desired as a final section of the III.	The Keet Particular Institute of the Control of the	cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
UN Kyoto Protocol (2nd Kyoto Period), the Second European Climate Change Programme (ECCP II), Paris climate conference (COP21) 2015 (Paris Agreement)	The UN Kyoto Protocol set of policy measures to reduce greenhouse gas emissions.  The Second European Climate Change Programme (ECCP II) aims to identify and develop all the necessary elements of an EU strategy to implement the Kyoto Protocol.  At the Paris climate conference (COP21) in December 2015, 195 countries adopted the first-ever universal, legally binding global climate deal. The agreement sets out a global action plan to put the world on track to avoid dangerous climate change by limiting global warming to well below 2°C.  • Binding legislation which aims to ensure the European Union meets its	The Kyoto Protocol is implemented through the European Climate Change Programme (ECCP II).  EU member states implement measures to improve on or compliment the specified measures and policies arising from the ECCP.  Under COP21, governments agreed to come together every 5 years to set more ambitious targets as required by science; report to each other and the public on how well they are doing to implement their targets; track progress towards the long-term goal through a robust transparency and accountability system.  Four pieces of complimentary legislation:	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.  Where new land use developments or activities occur
Package	<ul> <li>climate and energy targets for 2020.</li> <li>Aims to achieve a 20% reduction in EU greenhouse gas emissions from 1990 levels.</li> <li>Aims to raise the share of EU energy consumption produced from renewable resources to 20%.</li> <li>Achieve a 20% improvement in the EU's energy efficiency.</li> </ul>	Reform of the EU Emissions Trading System (EU ETS) to include a cap on emission allowances in addition to existing system of national caps.  Member States have agreed national targets for non-EU ETS emissions from countries outside the EU.  Meet the national renewable energy targets of 16% for Ireland by 2020.  Preparing a legal framework for technologies in carbon capture and storage.	as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU 2030 Framework for Climate and Energy	<ul> <li>A 2030 Framework for climate and energy, including EU-wide targets and policy objectives for the period between 2020 and 2030 that has been agreed by European countries.</li> <li>Targets include a 40% cut in greenhouse gas emissions compared to 1990 levels, at least a 27% share of renewable energy consumption and at least 27% energy savings compared with the business-as-usual scenario.</li> </ul>	To meet the targets, the European Commission has proposed the following policies for 2030:  A reformed EU emissions trading scheme (ETS).  New indicators for the competitiveness and security of the energy system, such as price differences with major trading partners, diversification of supply, and interconnection capacity between EU countries.  First ideas for a new governance system based on national plans for competitive, secure, and sustainable energy. These plans will follow a common EU approach. They will ensure stronger investor certainty, greater transparency, enhanced policy coherence and improved coordination across the EU.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
The Clean Air for Europe Directive (2008/50/EC) (EU Air Framework Directive)  Fourth Daughter Directive (2004/107/EC)	<ul> <li>The CAFE Directive merges existing legislation into a single directive (except for the fourth daughter directive).</li> <li>Sets new air quality objectives for PM<sub>2.5</sub> (fine particles) including the limit value and exposure related objectives.</li> <li>Accounts for the possibility to discount natural sources of pollution when assessing compliance against limit values.</li> <li>Allows the possibility for time extensions of three years (PM<sub>10</sub>) or up to five years (NO<sub>2</sub>, benzene) for complying with limit values, based on conditions and the assessment by the European Commission.</li> <li>The Fourth Daughter Directive lists pollutants, target values and monitoring requirements for the following: arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air.</li> </ul>	Sets objectives for ambient air quality designed to avoid, prevent or reduce harmful effects on human health and the environment as a whole. Aims to assess the ambient air quality in Member States on the basis of common methods and criteria. Obtains information on ambient air quality in order to help combat air pollution and nuisance and to monitor long-term trends and improvements resulting from national and community measures. Ensures that such information on ambient air quality is made available to the public. Aims to maintain air quality where it is good and improving it in other cases. Aims to promote increased cooperation between the Member States in reducing air pollution.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Noise Directive (2002/49/EC)	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 and use these maps to assess the number of people which may be impacted upon as a result of excessive noise levels;  Traw 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.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Floods Directive (2007/60/EC)	Establishes a framework for the assessment and management of flood risks     Reduce adverse consequences for human health, the environment, cultural heritage and economic activity associated with floods in the Community	Assess all water courses and coast lines at risk from flooding through Flood Risk Assessment     Prepare flood hazard maps and flood risk maps outlining the extent or potential of flooding and assets and humans at risk in these areas at River Basin District level (Article 3(2) (b)) and areas covered by Article 5(1) and Article 13(1) (b) in accordance with paragraphs 2 and 3.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Strategy
		Implement flood risk management plans and take adequate and coordinated measures to reduce flood risk for the areas covered by the Articles listed above.     Inform the public and allow the public to participate in planning process.	cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Water Framework Directive (2000/60/EC)	Establish a framework for the protection of water bodies to include inland surface waters, transitional waters, coastal waters and groundwater and their dependent wildlife and habitats.      Preserve and prevent the deterioration of water status and where necessary improve and maintain "good status" of water bodies.      Promote sustainable water usage.      The Water Framework Directive repealed the following Directives:	Protect, enhance and restore all water bodies and meet the environmental objectives outlined in Article 4 of the Directive. Achieve "good status" for all waters. Manage water bodies based on identifying and establishing river basins districts. Involve the public and streamline legislation. Prepare and implement a River Basin Management Plan for each river basin districts identified and a Register of Protected Areas. Establish a programme of monitoring for surface water status, groundwater status and protected areas. Recover costs for water services.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Groundwater Directive (2006/118/EC)	<ul> <li>Protect, control and conserve groundwater.</li> <li>Prevent the deterioration of the status of all bodies of groundwater.</li> <li>Implements measures to prevent and control groundwater pollution, including criteria for assessing good groundwater chemical status and criteria for the identification of significant and sustained upward trends and for the definition of starting points for trend reversals.</li> </ul>	Meet minimum groundwater standards listed in Annex 1 of Directive.     Meet threshold values adopted by national legislation for the pollutants, groups of pollutants and indicators of pollution which have been identified as contributing to the characterisation of bodies or groups of bodies of groundwater as being at risk, also taking into account Part B of Annex II.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Drinking Water Directive (98/83/EC)	Improve and maintain the quality of water intended for human consumption.     Protect human health from the adverse effects of any contamination of water intended for human consumption by ensuring that it is wholesome and clean.	Set values applicable to water intended for human consumption for the parameters set out in Annex I.  Set values for additional parameters not included in Annex I, where the protection of human health within national territory or part of it so requires. The values set should, as a minimum, satisfy the requirements of Article 4(1) (a).  Implement all measures necessary to ensure that regular monitoring of the quality of water intended for human consumption is carried out, in order to check that the water available to consumers meets the requirements of this Directive and in particular the parametric values set in accordance with Article 5.  Ensure that any failure to meet the parametric values set in accordance with Article 5 is immediately investigated in order to identify the cause.  Ensure that the necessary remedial action is taken as soon as possible to restore its quality and shall give priority to their enforcement action.  Undertake remedial action to restore the quality of the water where necessary to protect human health.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Urban Waste Water Treatment Directive (91/271/EEC)	<ul> <li>This Directive concerns the collection, treatment and discharge of urban waste water and the treatment and discharge of waste water from certain industrial sectors.</li> <li>The objective of the Directive is to protect the environment from the adverse effects of waste water discharges.</li> </ul>	Urban waste water entering collecting systems shall before discharge, be subject to secondary treatment.     Annex II requires the designation of areas sensitive to eutrophication which receive water discharges.     Establishes minimum requirements for urban waste water collection and treatment systems in specified agglomerations to include special requirements for sensitive areas and certain industrial sectors.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Environmental Liability Directive (2004/35/EC) as amended by Directive 2006/21/EC, Directive 2009/31/EC and Directive 2013/30/EU	<ul> <li>Establish a framework of environmental liability based on the 'polluter-pays' principle, to prevent and remedy environmental damage.</li> </ul>	<ul> <li>Relates to environmental damage caused by any of the occupational activities listed in Annex III, and to any imminent threat of such damage occurring by reason of any of those activities; damage to protected species and natural habitats caused by any occupational activities other than those listed in Annex III, and to any imminent threat of such damage occurring by reason of any of those activities, whenever the operator has been at fault or negligent.</li> <li>Where environmental damage has not yet occurred but there is an imminent threat of such damage occurring, the operator shall, without delay, take the necessary preventive measures.</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Strategy
		Where environmental damage has occurred the operator shall, without delay, inform the competent authority of all relevant aspects of the situation and take all practicable steps to immediately control, contain, remove or otherwise manage the relevant contaminants and/or any other damage factors in order to limit or to prevent further environmental damage and adverse effects on human health or further impairment of services and the necessary remedial measures, in accordance with Article 7.  The operator shall bear the costs for the preventive and remedial actions taken pursuant to this Directive.  The competent authority shall be entitled to initiate cost recovery proceedings against the operator.  The operator may be required to provide financial security guarantees to ensure their responsibilities under the directive are met.  The Environmental Liability Directive has been amended through a number of Directives. Implementation of the Environmental Liability Directive is contributed towards by a Multi-Annual Work Programme (MAWP) 'Making the Environmental Liability Directive more fit for purpose' that is updated annually to changing developments, growing knowledge and new needs.	framework for environmental protection and management.
European Convention on the Protection of the Archaeological Heritage (Valletta 1992)	<ul> <li>The aim of this (revised) Convention is to protect the archaeological heritage as a source of the European collective memory and as an instrument for historical and scientific study.</li> </ul>	The Valletta Convention makes the conservation and enhancement of the archaeological heritage one of the goals of urban and regional planning policies. The Convention sets guidelines for the funding of excavation and research work and publication of research findings. It also deals with public access, in particular to archaeological sites, and educational actions to be undertaken to develop public awareness of the value of the archaeological heritage. It also constitutes an institutional framework for pan-European co-operation on the archaeological heritage, entailing a systematic exchange of experience and experts among the various States.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Convention of the Protection of the Architectural Heritage of Europe (Granada 1995)	<ul> <li>The main purpose of the Convention is to reinforce and promote policies for the conservation and enhancement of Europe's heritage. It also affirms the need for European solidarity with regard to heritage conservation and is designed to foster practical co-operation among the Parties. It establishes the principles of "European co-ordination of conservation policies" including consultations regarding the thrust of the policies to be implemented.</li> </ul>	The reinforcement and promotion of policies for protecting and enhancing the heritage within the territories of the parties. The affirmation of European solidarity with regard to the protection of the heritage and the fostering of practical co-operation between states and regions.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
ICOMOS (2011) Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes ('Dublin Principles')	<ul> <li>It is aimed to assist in the documentation, protection, conservation and appreciation of industrial heritage as part of the heritage of human societies around the World.</li> </ul>	(1) Document and understand industrial heritage structures, sites, areas and landscapes and their values;     (11) Ensure effective protection and conservation of the industrial heritage structures, sites, areas and landscapes;     (11) Conserve and maintain the industrial heritage structures, sites, areas and landscapes; and     (IV) Present and communicate the heritage dimensions and values of industrial structures, sites, areas and landscapes to raise public and corporate awareness, and support training and research.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Council of Europe Framework Convention on the Value of Cultural Heritage for Society (Faro 2005)	Cultural heritage is a group of resources inherited from the past which people identify, independently of ownership, as a reflection and expression of their constantly evolving values, beliefs, knowledge and traditions. It includes all aspects of the environment resulting from the interaction between people and places through time.      A heritage community consists of people who value specific aspects of cultural heritage which they wish, within the framework of public action, to sustain and transmit to future generations.	Recognise that rights relating to cultural heritage are inherent in the right to participate in cultural life, as defined in the Universal Declaration of Human Rights. Recognise individual and collective responsibility towards cultural heritage. Emphasise that the conservation of cultural heritage and its sustainable use have human development and quality of life as their goal. Take the necessary steps to apply the provisions of this Convention concerning the role of cultural heritage in the construction of a peaceful and democratic society. Greater synergy of competencies among all the public, institutional and private actors concerned.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Landscape Convention 2000	<ul> <li>The developments in agriculture, forestry, industrial and mineral production techniques, together with the practices followed in town and country planning, transport, networks, tourism and recreation, and at a more general level, changes in the world economy, have in many cases accelerated the transformation of landscapes. The Convention expresses a concern to achieve sustainable development based on a balanced and</li> </ul>	Promote protection, management and planning of landscapes.     Organise European co-operation on landscape issues.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in- combination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Strategy
	harmonious relationship between social needs, economic activity and the environment. It aims to respond to the public's wish to enjoy high quality landscapes.		cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
The Seventh Environmental Action Programme (EAP) of the European Community (2013-2020)	It identifies three key objectives:  to protect, conserve and enhance the Union's natural capital  to turn the Union into a resource-efficient, green, and competitive low-carbon economy  safeguard the Union's citizens from environment-related pressures and risks to health and wellbeing	Four so called "enablers" will help Europe deliver on these objectives (goals):  Better implementation of legislation.  Better information by improving the knowledge base.  More and wiser investment for environment and climate policy.  Full integration of environmental requirements and considerations into other policies.  Two additional horizontal priority objectives complete the programme:  To make the Union's cities more sustainable.  To help the Union address international environmental and climate challenges more effectively.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Bern Convention (Convention on the Conservation of European Wildlife and Natural Habitats)	The convention has three main aims:     to conserve wild flora and fauna and their natural habitats     to promote cooperation between states     to give particular attention to endangered and vulnerable species including endangered and vulnerable migratory species	The Parties under the convention recognise the intrinsic value of nature, which needs to be preserved and passed to future generations, they also:  Seek to ensure the conservation of nature in their countries, paying particular attention to planning and development policies and pollution control.  Look at implementing the Bern Convention in central Eastern Europe and the Caucus.  Take account of the potential impact on natural heritage by other policies.  Promote education and information of the public, ensuring the need to conserve species is understood and acted upon.  Develop an extensive number of species action plans, codes of conducts, and guidelines, at their own initiative or in co-operation with other organisations.  Created the Emerald Network, an ecological network made up of Areas of Special Conservation Interest.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Bali Road Map (2007)	The overall goals of the project are twofold: To increase national capacity to co-ordinate ministerial views, participate in the UNFCCC process, and negotiate positions within the timeframe of the Bali Action Plan; and To assess investment and financial flows to address climate change for up to three key sectors and/or economic activities.	The Bali Action Plan is centred on four main building Blocks:  mitigation  adaptation  technology  financing	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Cancun Agreements (2010)	Set of decisions taken at the COP 16 Conference in Cancun in 2010 which addresses a series of key issues in the fight against climate change. Cancun Agreements' main objectives cover:  Mitigation Transparency of actions Technology Finance Adaptation Forests Capacity building	Among the most prominent agreements is the establishment of a Green Climate Fund to transfer money from the developed to developing world to tackle the impacts of climate change.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Doha Climate Gateway (2012)	Set of decisions taken at the COP 18 meeting in Doha in 2012 which pave the way for a new agreement in Paris in 2015.	Set out a timetable to adopt a universal climate agreement by 2015 (to come into effect in 2020); Complete the work under Bali Action Plan and to focus on new completing new targets; Strengthen the aim to cut greenhouse gases and help vulnerable countries to adapt; Amend Kyoto Protocol to include a new commitment period for cutting down the greenhouse gases emissions; and Provide the financial and technology support and new institutions to allow clean energy investment and sustainable growth in developing countries.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Common Agricultural Policy	To improve agricultural productivity, so that consumers have a stable supply of affordable food; and     To ensure that EU farmers can make a reasonable living.	ensuring viable food production that will contribute to feeding the world's population, which is expected to rise considerably in the future;     Climate change and sustainable management of natural resources;     Looking after the countryside across the EU and keeping the rural economy alive.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in- combination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Strategy
			cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU REACH Regulation (EC 1907/2006)	Aims to improve the protection of human health and the environment through the better and earlier identification of the intrinsic properties of chemical substances.	The aims are achieved by applying REACH, namely:  Registration, Evaluation, Authorisation; and Restriction of chemicals. REACH also aims to enhance innovation and competitiveness of the EU chemicals industry.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Stockholm Convention	The objective of the Stockholm Convention is to protect human health and the environment from persistent organic pollutants.	Prohibit and/or eliminate the production and use, as well as the import and export, of the intentionally produced Persistent Organic Pollutants (POPs) that are listed in Annex A to the Convention  Restrict the production and use, as well as the import and export, of the intentionally produced POPs that are listed in Annex B to the Convention  Reduce or eliminate releases from unintentionally produced POPs that are listed in Annex C to the Convention  Ensure that stockpiles and wastes consisting of, containing or contaminated with POPs are managed safely and in an environmentally sound manner  To target additional POPs Other provisions of the Convention relate to the development of implementation plans, information exchange, public information, awareness and education, research, development and monitoring, technical assistance, financial resources and mechanisms, reporting, effectiveness evaluation and non-compliance	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Ramsar Convention	The Convention's mission is "the conservation and wise use of all wetlands through local and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world".	Under the "three pillars" of the Convention, the Contracting Parties commit to:  Work towards the wise use of all their wetlands;  Designate suitable wetlands for the list of Wetlands of International Importance (the "Ramsar List") and ensure their effective management;  Cooperate internationally on transboundary wetlands, shared wetland systems and shared species.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European 2020 Strategy for Growth	Europe 2020 sets out a vision of Europe's social market economy for the 21st century and puts forward three mutually reinforcing priorities:  Smart growth: developing an economy based on knowledge and innovation;  Sustainable growth: promoting a more resource efficient, greener and more competitive economy;  Inclusive growth: fostering a high-employment economy delivering social and territorial cohesion.	In order to reach these priorities, the Commission proposes five quantitative targets to fulfil by 2020:  1. 75 % of the population aged 20-64 should be employed;  2. 3% of the EU's GDP should be invested in R&D  3. the "20/20/20" climate/energy targets should be met (including an increase to 30% of emissions reduction if the conditions are right);  4. the share of early school leavers should be under 10% and at least 40% of the younger generation should have a tertiary degree;  5. 20 million less people should be at risk of poverty.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Parliament resolutions, including: The European Green Deal (EGD) 2020	The deal sets out how to make Europe the first climate-neutral continent by 2050, boosting the economy, improving people's quality of life, caring for nature and leaving no one behind.	It sets out a roadmap with actions to boost the efficient use of resources by moving to a clean, circular economy, restore biodiversity and cut pollution.     It outlines investments required, financing tools available and explains how to ensure a just and inclusive transition.     In order to meet the goal to become climate neutral by 2050 as part of the European Green Deal, the European Union (EU) Commission proposed on 4th March 2020 to bring about the first European Climate Law and legally bind the target of net zero greenhouse gas emissions by 2050.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Logiclation Dlan etc	Cummary of high level aim / purpose / shiestive	Summary of lower level chiestings actions at	Dolovanao to the Stratory
Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Strategy
EU (2020) Biodiversity Strategy	A long-term plan for protecting nature and reversing the degradation of ecosystems across the European Union.	The Strategy contains specific commitments and actions to be delivered by 2030, including:  Establishing a larger EU-wide network of protected areas on land and at sea, building upon existing Natura 2000 areas, with strict protection for areas of very high biodiversity and climate value.  An EU Nature Restoration Plan - a series of concrete commitments and actions to restore degraded ecosystems across the EU by 2030, and manage them sustainably, addressing the key drivers of biodiversity loss.  A set of measures to enable the necessary transformative change: setting in motion a new, strengthened governance framework to ensure better implementation and track progress, improving knowledge, financing and investments and better respecting nature in public and business decision-making.  Measures to tackle the global biodiversity challenge, demonstrating that the EU is ready to lead by example towards the successful adoption of an ambitious global biodiversity framework under the Convention on Biological Diversity.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU (2018) Clean Air Policy Package	Aims to substantially reduce air pollution across the EU.	The proposed strategy sets out objectives for reducing the health and environmental impacts of air pollution by 2030, and contains legislative proposals to implement stricter standards for emissions and air pollution.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Leaders Pledge for Nature 2020	Political leaders (including Taoiseach Michael Martin) participating in the United Nations Summit on Biodiversity in September 2020, representing 75 countries from all regions and the European Union, have committed to reversing biodiversity loss by 2030.	As part of the UN Decade of Action to achieve sustainable development, the leaders commit to achieve the vision of Living in Harmony with Nature by 2050 by undertaking ten actions, including:  Putting biodiversity, climate, and the environment at the heart of COVID-19 recovery strategies and investments as well as national and international development and cooperation;  Developing and implementing an ambitious and transformational post-2020 global biodiversity framework for adoption at the 15th meeting of the Conference of the Parties (COP 15) to the UN Convention on Biological Diversity (CBD) in Kunming, China, as a key instrument to reach the SDGs;  Raising ambition and aligning domestic climate policies with the Paris Agreement on climate change, with enhanced nationally determined contributions (NDCs) and long-term strategies consistent with the temperature goals of the Paris Agreement, and the objective of net zero greenhouse gas (GHG) emissions by mid-century, and strengthen climate resilience of economies and ecosystems; and  Mainstream biodiversity into relevant sectoral and cross-sectoral policies at all levels, including in food production, agriculture, fisheries and forestry, energy, tourism, infrastructure and extractive industries, and trade and supply chains, as well as into key international agreements and processes.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Level			
Smarter Travel – A Sustainable Transport Future – A New Transport Policy for Ireland 2009 – 2020 (2009)	Outlines a policy for how a sustainable travel and transport system can be achieved.     Sets out five key goals:	Others lower level aims include:	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Investment Framework for Transport in Ireland	The high-level strategic framework for prioritising future investment in the land transport network. This new framework is the Department of Transport's contribution to Project Ireland 2040, Government's long-term strategy for accommodating population growth in a sustainable manner and making Ireland a better country for all of its people. It has been developed to ensure that our transport sectoral strategy is underpinned by and supports the achievement of the spatial objectives and National Strategic Objectives set out in the National Planning Framework.	The framework establishes high-level investment priorities to efficiently and effectively address key transport challenges identified by the background analysis and to ensure that transport investment is aligned with and supports Government's overarching spatial and climate change objectives, as articulated in the National Planning Framework and Climate Action Plan.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Strategy
			framework for environmental protection and
Investing in our Future: A Strategic Framework for Investment in Land Transport (SFILT) – Department of Transport, Tourism and Sport	SFILT sets out a set of priorities to guide the allocation of the State's investment to best develop and manage Ireland's land transport network over the coming decades.	The three priorities stated in SFILT are:  • Priority 1: Achieve steady state maintenance (meaning that the maintenance and renewal of the existing transport system is at a sufficient level to maintain the system in an adequate condition);  • Priority 2: Address urban congestion; and  • Priority 3: Maximise the value of the road network.  In delivering on the steady state maintenance objective set out in SFILT, the Plan includes for:  • Planned replacement programme for the bus fleet operated under Public Service Obligation ("PSO") contracts;  • Tram refurbishment and asset renewal in the case of light rail; and  • To the extent within the Authority' remit, support for the operation of the existing rail network within the GDA.	management.  Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Cycle Network Scoping Study 2010	<ul> <li>Outlines objectives and actions aimed at developing a strong cycle network in Ireland</li> <li>Sets out 19 specific objectives, and details the 109 actions, aimed at ensuring that a cycling culture is developed</li> </ul>	Sets a target where 10% of all journeys will be made by bike by 2020 Proposes the planning, infrastructure, communication, education and stakeholder participations measures required to implement the initiative	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Policy Framework for Alternative Fuels Infrastructure for Transport in Ireland 2017 to 2030	<ul> <li>This National Policy Framework on Alternative Fuels Infrastructure for Transport represents the first step in communicating our longer-term national vision for decarbonising transport by 2050, the cornerstone of which is our ambition that by 2030 all new cars and vans sold in Ireland will be zero-emissions capable.</li> <li>By 2030 it is envisaged that the movement in Ireland to electrically-fuelled cars and commuter rail will be well underway, with natural gas and biofuels developing as major alternatives in the freight and bus sectors.</li> </ul>	Targets for alternative fuel infrastructure include the following:  AFV forecasts  Electricity targets  Natural gas (CNG, LNG) targets  Hydrogen targets  Biofuels targets  LPG targets  Synthetic and paraffinic fuels targets	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Ireland 2040 - Our Plan, the National Planning Framework and the National Development Plan (2021- 2030)	The National Planning Framework is the Government's high-level strategic plan for shaping the future growth and development of to the year 2040. It is a framework to guide public and private investment, to create and promote opportunities for people, and to protect and enhance the environment - from villages to cities, and everything around and in between.  The National Development Plan sets out the investment priorities that will underpin the successful implementation of the new National Planning Framework. This will guide national, regional and local planning and investment decisions in Ireland over the next two decades, to cater for an expected population increase of over 1 million people.	National Strategic Outcomes as follows:  1. Compact Growth  2. Enhanced Regional Accessibility  3. Strengthened Rural Economies and Communities  4. Sustainable Mobility  5. A Strong Economy, supported by Enterprise, Innovation and Skills  6. High-Quality International Connectivity  7. Enhanced Amenity and Heritage  8. Transition to a Low-Carbon and Climate-Resilient Society  9. Sustainable Management of Water and other Environmental Resources  10. Access to Quality Childcare, Education and Health Services	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Planning, Land Use and Transport Outlook 2040	The PLUTO takes account of forecasted future economic and demographic scenarios, affordability considerations and relevant Government policies	The PLUTO seeks to:  1. Quantify in broad terms the appropriate scale of financial investment in land transport over the long term;  2. Consider how fiscal, environmental and technological developments might impact on this investment; and,  3. Identify strategic priorities for future investment to ensure land transport infrastructure provision facilitates the objectives of Project Ireland 2040.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Planning and Development Act 2000 (as amended)	The core principal objectives of this Act are to amend the Planning Acts of 2000 – 2009 with specific regard given to supporting economic renewal and sustainable development.	Development, with certain exceptions, is subject to development control under the Planning Acts and the local authorities grant or refuse planning permission for development, including ones within protected areas.  There are, however, a range of exemptions from the planning system. Use of land for agriculture, peat extraction and afforestation, subject to certain thresholds, is generally exempt from the requirement to obtain planning permission.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Strategy
		Additionally, Environmental Impact Assessment (EIA) is required for a range of classes and large-scale projects.     Under planning legislation, Development Plans must include mandatory objectives for the conservation of the natural heritage and for the conservation of European sites and any other sites which may be prescribed. There are also discretionary powers to set objectives for the conservation of a variety of other elements of the natural heritage.	other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities (Environmental Assessment of Certain Plans and Programmes Regulations 2004 (S.I. 435 of 2004), as amended by S.I. 200 of 2011	The purpose of these Regulations is to transpose into Irish law Directive 2001/42/EC of 27 June 2001 (O.J. No. L 197, 21 July 2001) on the assessment of the effects of certain plans and programmes on the environment — commonly known as the Strategic Environmental Assessment (SEA) Directive.	The Regulations cover plans and programmes in all of the sectors listed in article 3(2) of the Directive except land-use planning.  These Regulations also amend certain provisions of the Planning and Development Act 2000 to provide the statutory basis for the transposition of the Directive in respect of land-use planning.  Transposition in respect of the land-use planning sector is contained in the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. No. 436 of 2004).	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2011, as amended)	These Regulations provide a new for the implementation in Ireland of Council Directive 92/43/EEC on habitats and protection of wild fauna and flora (as amended) and for the implementation of Directive 2009/147/EC of the European Parliament and of the Council on the protection of wild birds.	They provide, among other things, for: the appointment and functions of authorized officers; identification, classification and other procedures relative to the designation of Community sites.  The Regulations have been prepared to address several judgments of the 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.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Waste Management Act 1996, as amended	To make provision in relation to the prevention, management and control of waste; to give effect to provisions of certain acts adopted by institutions of the European communities in respect of those matters; to amend the Environmental Protection Agency Act, 1992, and to repeal certain enactments and to provide for related matters.	The Waste Management Act contains a number of key legal obligations, including requirements for waste management planning, waste collection and movement, the authorisation of waste facilities, measures to reduce the production of waste and/or promote its recovery.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities Environmental Objectives (FPM) Regulations 2009 (S.I 296 of 2009)	The purpose of these Regulations is to support the achievement of favourable conservation status for freshwater pearl mussels	Set environmental quality objectives for the habitats of the freshwater pearl mussel populations named in the First Schedule to these Regulations that are within the boundaries of a site notified in a candidate list of European sites, or designated as a Special Area of Conservation, under the European Communities (Natural Habitats) Regulations, 1997 (S.I. No. 94/1997). Require the production of sub-basin management plans with programmes of measures to achieve these objectives.  Set out the duties of public authorities in respect of the sub-basin management plans and programmes of measure.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities Environmental Objectives (Groundwater) Regulations 2010 (S. I 9 of 2010), as amended (S. I. No. 366 of 2016)	To amend the European Communities Environmental Objectives (Groundwater) Regulations 2010 (S.I. No. 9 of 2010) to make further provision to implement Commission Directive 2014/80/EU of 20 June 2014 amending Annex II to Directive 2006/118/EC of the European Parliament and of the Council on the protection of groundwater against pollution and deterioration.	The substances and threshold values set out in Schedule 5 to S.I. No. 9 of 2010 have been reviewed and amended where necessary, based on existing monitoring information and international guidelines on appropriate threshold values.  Part A of Schedule 6 has been amended to include changes to the rules governing the determination of background levels for the purposes of establishing threshold values for groundwater pollutants and indicators of pollution.  Part B of Schedule 6 has been amended to include nitrites and phosphorus (total) / phosphates among the minimum list of pollutants and their indicators which the Environmental Protection Agency (EPA) must consider when establishing threshold values.  Part C of Schedule 6 amends the information to be provided to the Minister by the EPA with regard to the pollutants and their indicators for which threshold values have been established.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2014 (S.I. No. 31 of 2014)	These Regulations, which give effect to Ireland's 3 <sup>rd</sup> Nitrates Action Programme, provide statutory support for good agricultural practice to protect waters against pollution from agricultural sources	The Regulations include measures such as: Periods when land application of fertilisers is prohibited Limits on the land application of fertilisers Storage requirements for livestock manure; and	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in- combination effects (see Section 3.4 and 4.3.1) may

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Strategy
		Monitoring of the effectiveness of the measures in terms of agricultural practice and impact on water quality.	arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Climate Action and Low Carbon Development Act 2015	An Act to provide for the approval of plans by the Government in relation to climate change for the purpose of pursuing the transition to a low carbon, climate resilient and environmentally sustainable economy.	When considering a plan or framework, for approval, the Government shall endeavour to achieve the national transition objective within the period to which the objective relates and shall, in endeavouring to achieve that objective, ensure that such objective is achieved by the implementation of measures that are cost effective and shall, for that purpose, have regard to:  • The ultimate objective specified in Article 2 of the United Nations Framework Convention on Climate Change done at New York on 9 May 1992 and any mitigation commitment entered into by the European Union in response or otherwise in relation to that objective,  • The policy of the Government on climate change,  • Climate justice,  • Any existing obligation of the State under the law of the European Union or any international agreement referred to in section 2; and  • The most recent national greenhouse gas emissions inventory and projection of future greenhouse gas emissions, prepared by the Agency.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
The Sustainable Development Goals National Implementation Plan (2018 – 2020)	National Implementation Plan 2018 - 2020 is in direct response to the 2030 Agenda for Sustainable Development and provides a whole-of-government approach to implement the 17 Sustainable Development Goals (SDGs).     The Plan provides an 'SDG Matrix' which identifies the responsible Government Departments for each of the 169 targets. It also includes an 'SDG Policy Map' indicating the relevant national policies for each of the targets.	The Plan identifies four strategic priorities to guide implementation:  Awareness: raise public awareness of the SDGs;  Participation: provide stakeholders opportunities to engage and contribute to follow-up and review processes, and further develop national implementation of the Goals;  Support: encourage and support efforts of communities and organisations to contribute towards meeting the SDGs, and foster public participation; and  Policy alignment: develop alignment of national policy with the SDGs and identify opportunities for policy coherence.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Infrastructure and Capital Investment Plan (2016-2021)	€27 billion multi-annual Exchequer Capital Investment Plan, which is supported by a programme of capital investment in the wider State sector, and which over the period 2016 to 2021 will help to lay the foundations for continued growth in Ireland.	This Capital Plan reflects the Government's commitment to supporting strong and sustainable economic growth and raising welfare and living standards for all. It includes allocations for new projects across a number of key areas and funding to ensure that the present stock of national infrastructure is refreshed and maintained.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Union (Birds and Natural Habitats) (Sea-Fisheries) Regulations 2013 (S.I. 290 of 2013)	These regulations have been drafted to implement the responsibilities of the Minister for Agriculture Food and the Marine in relation to sea fisheries in European sites, in accordance with the Habitats and Birds Directives as transposed by the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2011).	Regulation 3 provides for the submission of a Fisheries Natura Plan in relation to planned fisheries; Regulation 4 provides for a screening of a Fisheries Natura Plan to determine whether or not an appropriate assessment is required; Regulation 5 provides for an appropriate assessment of a Fisheries Natura Plan and also provides for public and statutory consultation; Regulation 6 provides for the Minister to make a determination to adopt a Fisheries Natura Plan. The Minister may amend, withdraw or revoke a plan; Regulation 7 provides for publication of the adopted Fisheries Natura Plan; Regulation 8 provides for a Risk Assessment of unplanned fisheries and also provides for public and statutory consultation on the assessment; Regulation 9 provides for the issue of a Natura Declaration to prohibit, restrict including restricting by permit, control, etc. of sea fishing activities; Regulation 10 provides for Natura Permits to be issued where required by Natura Declarations; and Regulations 11 to 31 deal with functions of authorised officers and related matters, offences, etc.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Ireland's National Renewable Energy Action Plan 2010 (Irish Government submission to the European Commission)	The National Renewable Energy Action Plan (NREAP) sets out the Government's strategic approach and concrete measures to deliver on Ireland's 16% target under Directive 2009/28/EC.	The NREAP sets out the Member State's national targets for the share of energy from renewable sources to be consumed in transport, electricity and heating and cooling in 2020, and demonstrates how the Member State will meet its overall national target established under the Directive.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Strategy
			cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Strategy for Renewable Energy (2012-2020)	The Government's overarching strategic objective is to make renewable energy an increasingly significant component of Ireland's energy supply by 2020, so that at a minimum it will achieve its legally binding 2020 target in the most cost-efficient manner for consumers.  Of critical importance is the role which the renewable energy sector plays in job creation and economic activity as part of the Government's action plan for jobs.	This document sets out five strategic goals, reflecting the key dimensions of the renewable energy challenge to 2020:  Increasing on and offshore wind,  Building a sustainable bioenergy sector,  Fostering R&D in renewables such as wave & tidal,  Growing sustainable transport; and  Building out robust and efficient networks.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Governments White Paper 'Ireland's Transition to a Low Carbon Energy Future' (2015 – 2030)	The White Paper sets out a vision and a framework to guide Irish energy policy between now and 2030. A complete energy policy update informed by the vision to transform Ireland into a low carbon society and economy by 2050.	2030 will represent a significant milestone, meaning:  Reduced GHG emissions from the energy sector by between 80% and 95% Ensuring that secure supplies of competitive and affordable energy remain available to citizens and businesses.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Policy Position on Climate Action and Low Carbon Development (2014)	The National Policy Position provides a high-level policy direction for the adoption and implementation by Government of plans to enable the State to move to a low carbon economy by 2050.  Statutory authority for the plans is set out in the Climate Action and Low Carbon Development Act 2015.	National climate policy in Ireland: Recognises the threat of climate change for humanity; Anticipates and supports mobilisation of a comprehensive international response to climate change, and global transition to a low-carbon future; Recognises the challenges and opportunities of the broad transition agenda for society; and Aims, as a fundamental national objective, to achieve transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Climate Action and Low Carbon Development Act 2015 (and Amendment Bill 2021)	An Act to provide for the approval of plans by the Government in relation to climate change for the purpose of pursuing the transition to a low carbon, climate resilient and environmentally sustainable economy.  The Climate Action and Low Carbon Development (Amendment) Bill 2021 seeks to amend the principle Act of 2015 (outlined below) by reinforcing Ireland's transition to Net Zero and achieve its commitment to a climate neutral economy by no later than 2050. It establishes a legally binding framework with clear targets and commitments set in law, and ensure the necessary structures and processes are embedded on a statutory basis to ensure Ireland achieves its national, EU and international climate goals and obligations in the near and long term.	When considering a plan or framework, for approval, the Government shall endeavour to achieve the national transition objective within the period to which the objective relates and shall, in endeavouring to achieve that objective, ensure that such objective relates and shall, in endeavouring to achieve that objective, ensure that such objective is achieved by the implementation of measures that are cost effective and shall, for that purpose, have regard to:  • The ultimate objective specified in Article 2 of the United Nations Framework Convention on Climate Change done at New York on 9 May 1992 and any mitigation commitment entered into by the European Union in response or otherwise in relation to that objective,  • The policy of the Government on climate change,  • Climate justice,  • Any existing obligation of the State under the law of the European Union or any international agreement referred to in section 2; and  The most recent national greenhouse gas emissions inventory and projection of future greenhouse gas emissions, prepared by the Agency.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Clean Air Strategy [in preparation]	The Clean Air Strategy will provide the strategic policy framework necessary to identify and promote integrated measures across government policy that are required to reduce air pollution and promote cleaner air while delivering on wider national objectives.	Having a National Strategy will provide a policy framework by which Ireland can develop the necessary policies and measures to comply with new and emerging EU legislation.  The Strategy should also help tackle climate change.  The Strategy will consider a wider range of national policies that are relevant to clean air policy such as transport, energy, home heating and agriculture.  In any discussion relating to clean air policy, the issue of people's health is paramount and this will be a strong theme of the Strategy.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EirGrid's Grid25 Strategy and associated Grid25 Implementation Programme 2017-2022	EirGrid's mission is to develop, maintain and operate a safe, secure, reliable, economical and efficient transmission system for Ireland; "Our vision is of a grid developed to match future needs, so it can safely and reliably carry power all over	Grid25, EirGrid's roadmap to uprate the electricity transmission grid by 2025, continues to be implemented so as to increase the capacity of the grid, to satisfy future demand,	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Strategy
	the country to the major towns and cities and onwards to every home, farm and business where the electricity is consumed and so it can meet the needs of consumers and generators in a sustainable way."	and to help Ireland meet its target of 40 per cent of electricity from renewable energy by 2020.	combination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
All Island Grid Study 2008	The All Island Grid Study is the first comprehensive assessment of the ability of the electrical power system and, as part of that, the transmission network ("the grid") on the island of Ireland to absorb large amounts of electricity produced from renewable energy sources.  The objective of this five-part study is to assess the technical feasibility and the relative costs and benefits associated with various scenarios for increased shares of electricity sourced from renewable energy in the all island power system.	<ul> <li>Key conclusions of the study:</li> <li>The presented results indicate that the differences in cost between the highest cost and the lowest cost portfolios are low (7%), given the assumptions made and costs included in the Study.</li> <li>All but the high coal-based portfolio lead to significant reductions of CO<sub>2</sub> emissions compared to portfolio 1</li> <li>All but the high coal-based portfolio lead to reductions on the dependency of the all island system on fuel and electricity imports.</li> <li>The limitations of the study may overstate the technical feasibility of the portfolios analysed and could impact the costs and benefits resulting. Further work is required to understand the extent of such impact.</li> <li>Timely development of the transmission networks, requiring means to address the planning challenge, is a precondition for implementation of the portfolios considered.</li> <li>Market mechanisms must facilitate the installation of complementary, i.e. flexible, dispatchable plant, so as to maintain adequate levels of system security.</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Strategy for the Future Development of National and Regional Greenways (2018)	The objective of this Strategy is to assist in the strategic development of nationally and regionally significant Greenways in appropriate locations constructed to an appropriate standard in order to deliver a quality experience for all Greenways users.  It also aims to increase the number and geographical spread of Greenways of scale and quality around the country over the next 10 years with a consequent significant increase in the number of people using Greenways as a visitor experience and as a recreational amenity.	A Strategic Greenway network of national and regional routes, with a number of high capacity flagship routes that can be extended and/or link with local Greenways and other cycling and walking infrastructure; Greenways of scale and appropriate standard that have significant potential to deliver an increase in activity tourism to Ireland and are regularly used by overseas visitors, domestic visitors and locals thereby contributing to a healthier society through increased physical activity; Greenways that provide a substantially segregated off road experience linking places of interest, recreation and leisure in areas with beautiful scenery of different types with plenty to see and do; and Greenways that provide opportunities for the development of local businesses and economies, and Greenways that are developed with all relevant stakeholders in line with an agreed code of practice.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Water Resources Plan [in preparation]	The NWRP is a plan on how to provide a safe, secure and reliable water supply to customers for the next 25 years, without causing adverse impact on the environment. The objective of the NWRP is to set out how we intend to maintain the supply and demand for drinking water over the short, medium and long term whilst minimising the impact on the environment.	The key objectives of the plan are to:  Identify areas where there are current and future potential water supply shortfalls, taking into account normal and extreme weather conditions  Assess the current and future water demand from homes, businesses, farms, and industry  Consider the impacts of climate change on Ireland's water resources  Develop a drought plan advising measures to be taken before and during drought events  Develop a plan detailling how we deal with the material that is produced as a result of treating drinking water  Identify, develop and assess options to help meet potential shortfalls in water supplies  Assess the water resources available at a national level including lakes, rivers and groundwater	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Strategic Plan for Aquaculture Development (2014- 2020)	Vision: "Aquaculture in RC is economically, socially and ecologically sustainable, with a developed infrastructure, strong human potentials and an organized market. The consumption of aquaculture products is equal or above EU average, while the technological development of the sector is among the best in the EU."	General development and growth objectives of marine and freshwater aquaculture (2014 – 2020):  Strengthen the social, business and administrative environment for aquaculture development  Increase in the total production to 24,050 tonnes while adhering to the principles of economic, social and ecological sustainability  Improvement of the perception and increase in the national consumption of National products	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Construction 2020, A Strategy for a Renewed Construction Sector	Construction 2020 sets out a package of measures agreed by the Government and is aimed at stimulating activity in the building industry. The Strategy aims both to increase the capacity of the sector to create and maintain jobs, and to deliver a sustainable sector, operating at an appropriate level. It seeks to learn the lessons of the past and to ensure	This Strategy therefore addresses issues including: A strategic approach to the provision of housing, based on real and measured needs, with mechanisms in place to detect and act when things are going wrong; Continuing improvement of the planning process, striking the right balance between current and future requirements; The availability of financing for viable and worthwhile projects;	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Strategy
Legislation, Plan, etc.	that the right structures and mechanisms are in place so that they are not	Access to mortgage finance on reasonable and sustainable terms;	cumulatively contribute towards – in combination with
	repeated.	Ensuring we have the tools we need to monitor and regulate the sector in a way that underpins public confidence and worker safety;     Ensuring a fit for purpose sector supported by a highly skilled workforce achieving high quality and standards; and     Ensuring opportunities are provided to unemployed former construction workers to contribute to the recovery of the sector.	other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Sustainable Development: A Strategy for Ireland (1997)	<ul> <li>The overall aim of this Strategy is to ensure that economy and society in Ireland can develop to their full potential within a well-protected environment, without compromising the quality of that environment, and with responsibility towards present and future generations and the wider international community.</li> </ul>	The Strategy addresses all areas of Government policy, and of economic and societal activity, which impact on the environment. It seeks to re-orientate policies as necessary to ensure that the strong growth Ireland enjoys and seeks to maintain will be environmentally sustainable.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Landscape Strategy for Ireland 2015-2025 and National Landscape Character Assessment (pending preparation)	The National Landscape Strategy will be used to ensure compliance with the European Landscape Convention and to establish principles for protecting and enhancing the landscape while positively managing its change. It will provide a high-level policy framework to achieve balance between the protection, management and planning of the landscape by way of supporting actions.  Landscape Strategy Vision: "Our landscape reflects and embodies our cultural values and our shared natural heritage and contributes to the well-being of our society, environment and economy. We have an obligation to ourselves and to future generations to promote its sustainable protection, management and planning."	The objectives of the National Landscape Strategy are to: Implement the European Landscape Convention by integrating landscape into the approach to sustainable development; Establish and embed a public process of gathering, sharing and interpreting scientific, technical and cultural information in order to carry out evidence-based identification and description of the character, resources and processes of the landscape; Provide a policy framework, which will put in place measures at national, sectoral including agriculture, tourism, energy, transport and marine - and local level, together with civil society, to protect, manage and properly plan through high quality design for the sustainable stewardship of the landscape; Ensure that we take advantage of opportunities to implement policies relating to landscape use that are complementary and mutually reinforcing and that conflicting policy objectives are avoided in as far as possible.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Ireland's National Waste Policy 2020 – 2025	The Policy sets out new targets to tackle waste and move towards a circular economy.	The plan includes halving our food waste by 2030, the introduction of a deposit and return scheme for plastic bottles and cans, a ban on certain single use plastics from July 2021, and a levy on disposable cups. Other measures include applying green criteria and circular economy principles in all public procurement, a waste recovery levy to encourage recycling, and ensuring all packaging is reusable or recyclable by 2030.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Hazardous Waste Management Plan (EPA) 2014-2020	This Plan sets out the priorities to be pursued over the next six years and beyond to improve the management of hazardous waste, taking into account the progress made since the previous plan and the waste policy and legislative changes that have occurred since the previous plan was published. Section 26 of the Waste Management Act 1996 as amended, sets out the overarching objectives for the National Hazardous Waste Management Plan. In this context, the following objectives are included as priorities for the revised Plan period:  To prevent and reduce the generation of hazardous waste by industry and society generally;  To maximise the collection of hazardous waste with a view to reducing the environmental and health impacts of any unregulated waste;  To strive for increased self-sufficiency in the management of hazardous waste and to minimise hazardous waste export;  To minimise the environmental, health, social and economic impacts of hazardous waste generation and management.	The revised Plan makes 27 recommendations under the following topics:  Prevention Collection Self-sufficiency Regulation Legacy issues North-south cooperation Guidance and awareness Implementation	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Ministerial Guidelines such as Sustainable Rural Housing Guidelines and Flood Risk Management Guidelines	<ul> <li>The Department produces a range of guidelines designed to help planning authorities, An Bord Pleanála, developers and the general public and cover a wide range of issues amongst others, architectural heritage, child care facilities, landscape, quarries and residential density.</li> </ul>	The Minister issues statutory guidelines under Section 28 of the Act which planning authorities and An Bord Pleanála are obliged to have regard to in the performance of their planning functions.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Strategy
			framework for environmental protection and
HSE Healthy Ireland Framework for Improved Health and Wellbeing 2013-2025	The vision is: "A Healthy Ireland, where everyone can enjoy physical and mental health and wellbeing to their full potential, where wellbeing is valued and supported at every level of society and is everyone's responsibility."  The vision is: "A Healthy Ireland, where everyone can enjoy physical and mental mental potential where well being is valued and is everyone's responsibility."	These four goals are interlinked, interdependent and mutually supportive:  Goal 1: Increase the proportion of people who are healthy at all stages of life Goal 2: Reduce health inequalities Goal 3: Protect the public from threats to health and wellbeing Goal 4: Create an environment where every individual and sector of society can play their part in achieving a healthy Ireland	management.  Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Our Sustainable Future: A framework for Sustainable Development for Ireland 2012	A medium to long term framework for advancing sustainable development and the green economy in Ireland. It identifies spatial planning as a key challenge for sustainable development and sets a series of measures to address these challenges.	Sets out the challenges facing us and how we might address them in making sure that quality of life and general wellbeing can be improved and sustained in the decades to come.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Delivering a Sustainable Energy Future for Ireland – The Energy Policy Framework 2007 – 2020 (2007)	White paper setting out a framework for delivering a sustainable energy future in Ireland.  Outlines strategic Goals for:  Security of Supply Sustainability of Energy Competitiveness of Energy Supply	The underpinning Strategic Goals are:  Ensuring that electricity supply consistently meets demand  Ensuring the physical security and reliability of gas supplies to Ireland  Enhancing the diversity of fuels used for power generation  Delivering electricity and gas to homes and businesses over efficient, reliable and secure networks  Creating a stable attractive environment for hydrocarbon exploration and production  Being prepared for energy supply disruptions	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Adaptation Framework (NAF) 2018 and associated regional, local and sectoral adaptation plans	NAF specifies the national strategy for the application of adaptation measures in different sectors and by local authorities in their administrative areas in order to reduce the vulnerability of the State to the negative effects of climate change and to avail of any positive effects that may occur	<ul> <li>Adaptation under this Framework should seek to minimise costs and maximise the opportunities arising from climate change.</li> <li>Adaptation actions range from building adaptive capacity (e.g. increasing awareness, sharing information and targeted training) through to policy and finance-based actions.</li> <li>Adaptation actions must be risk based, informed by existing vulnerabilities of our society and systems and an understanding of projected climate change.</li> <li>Adaptation actions taken to increase climate resilience must also consider impacts on other sectors and levels of governance</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
2030 Climate and Energy Framework	Adopted October 2014, includes EU-wide targets and policy objectives for the period from 2021 to 2030.	Key targets for 2030:     At least 40% cut in greenhouse gas emissions (from 1990 levels).     At least 32% share for renewable energy. This was revised upwards in 2018.     At least 32.5% improvement in energy efficiency. This was revised upwards in 2018.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Renewable Energy Action Plan (2010)	Sets out the Member State's national targets for the share of energy from renewable sources to be consumed in transport, electricity and heating and cooling in 2020, and demonstrates how the Member State will meet its overall national target established under the Directive.	Including Ireland's 16% target of gross final consumption to come from renewables by 2020.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Strategy
Legisiation, Plan, etc.	Summary of mign-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	framework for environmental protection and
			management.
National Energy Efficiency Action Plan for Ireland (2009 – 2020)	This is the second National Energy Efficiency Action Plan for Ireland.	The Plan reviews the original 90 actions outlined in the first Plan and updates/renews/removes them as appropriate.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Energy & Climate Plan (NECP) 2021 – 2030	Irelands National Energy & Climate Plan (NECP) 2021-2030 takes into account energy and climate policies developed up to 2019, the levels of demographic and economic growth identified in the National Planning Framework - Project 2040 and includes all of the climate and energy measures as set out in the National Development Plan 2018-2027.	The planned policies and measures that were identified up to the end of 2019, collectively deliver a 30% reduction by 2030 in non-Emission Trading Systems greenhouse gas emissions (from 2005 levels). Ireland is committed to achieving a 7% annual average reduction in greenhouse gas emissions between 2021 and 2030. The NECP was drafted in line with the current EU effort-sharing approach, before the Government committed to this higher level of ambition, and therefore does not reflect this higher commitment. Ireland is currently developing those policies and measures and intends to integrate the revision of the NECP into the process which will be required for increasing the overall EU contribution under the Paris Agreement.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Wildlife Act of 1976	The act provides protection and conservation of wild flora and fauna.	Provides protection for certain species, their habitats and important ecosystems	Where new land use developments or activities occur
Wildlife (Amendment) Act, 2000		Give statutory protection to NHAs Enhances wildlife species and their habitats Includes more species for protection	as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Actions for Biodiversity (2017-2021) Ireland's National Biodiversity Plan	<ul> <li>Sets out strategic objectives, targets and actions to conserve and restore Ireland's biodiversity and to prevent and reduce the loss of biodiversity in Ireland and globally.</li> </ul>	<ul> <li>To mainstream biodiversity in the decision-making process across all sectors.</li> <li>To substantially strengthen the knowledge base for conservation, management and sustainable use of biodiversity.</li> <li>To increase awareness and appreciation of biodiversity and ecosystems services.</li> <li>To conserve and restore biodiversity and ecosystem services in the wider countryside.</li> <li>To conserve and restore biodiversity and ecosystem services in the marine environment.</li> <li>To expand and improve on the management of protected areas and legally protected species.</li> <li>To substantially strengthen the effectiveness of international governance for biodiversity and ecosystem services.</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Broadband Plan (2012)	Sets out the strategy to deliver high speed broadband throughout Ireland.	The Plan sets out:  A clear statement of Government policy on the delivery of High-Speed Broadband.  Specific targets for the delivery and rollout of high-speed broadband and the speeds to be delivered.  The strategy and interventions that will underpin the successful implementation of these targets.  A series of specific complementary measures to promote implementation of Government policy in this area.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities (Water Policy) Regulations of 2003 (SI 722 of 2003)  European Communities (Water Policy) Regulations of 2003 (SI 350 of 2014)  European Communities Environmental Objectives (Surface	<ul> <li>Transpose the Water Framework Directive into legislation.</li> <li>Outlines the general duty of public authorities in relation to water.</li> <li>Identifies the competent authorities in charge of water policy (amended to Irish Water in 2013) and gives EPA and the CER the authority to regulate and supervise their actions.</li> </ul>	Requires the public to be informed and consulted on the Plan and for progress reports to be published on River Basin Districts (RBDs). Implements a Register of protected areas, Classification systems and Monitoring programmes for water bodies. Allows the competent authority to recover the cost of damage/destruction of status of water body.  Outlines environmental objectives and programme of measures and environmental quality standards for priority substances. Outlines criteria for assessment of groundwater. Outlines environmental objectives to be achieved for surface water bodies.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory

Lawislation Dlaw ata	Summon of high level size / number / shipative	Summary of layer layer shipes actions ato	Delevenes to the Chrotomy
Legislation, Plan, etc. waters) Regulations of 2009 (SI 272	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Strategy  framework for environmental protection and
of 2009)		<ul> <li>Outlines surface water quality standards.</li> <li>Establishes threshold values for the classification and protection of surface waters against pollution and deterioration in quality.</li> </ul>	management.
European Communities Environmental Objectives (Groundwater) Regulations of 2010 (SI 9 of 2010)	<ul> <li>Transpose the requirements of the Groundwater Directive 2006/118/EC into Irish Legislation.</li> </ul>	Outlines environmental objectives to be achieved for groundwater bodies of groundwater against pollution and deterioration in quality.     Sets groundwater quality standards.     Outlines threshold values for the classification and protection of groundwater.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Water Pollution Acts 1977 to 1990	The Water Pollution Acts allow Local Authorities the authority regulate and supervise actions relating to water in their division.	The Water Pollution Acts enable local authorities to: Prosecute for water pollution offences. Attach appropriate pollution control conditions in the licensing of effluent discharges from industry, etc., made to waters. Issue notices ("section 12 notices") to farmers, etc., specifying measures to be taken within a prescribed period to prevent water pollution. Issue notices requiring a person to cease the pollution of waters and requiring the mitigation or remedying of any effects of the pollution in the manner and within the period specified in such notices; Seek court orders, including High Court injunctions, to prevent, terminate, mitigate or remedy pollution/its effects. Prepare water quality management plans for any waters in or adjoining their functional areas.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Water Services Act 2007	Provides the water services infrastructure.	Key strategic objectives include:	Where new land use developments or activities occur
Water Services (Amendment) Act 2012	<ul> <li>Outlines the responsibilities involved in delivering and managing water services.</li> <li>Identifies the authority in charge of provision of water and waste water supply.</li> </ul>	Ensuring Irish Water delivers infrastructural projects that meet key public health, environmental and economic objectives in the water services sector.     Ensuring the provision of adequate water and sewerage services in the gateways and hubs listed in the National Spatial Strategy, and in other locations where services need	as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in- combination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply
Water Services Act (No. 2) 2013	<ul> <li>Irish Water was given the responsibility of the provision of water and waste water services in the amendment act during 2013, therefore these services are no longer the responsibility of the 34 Local Authorities in Ireland.</li> </ul>	<ul> <li>to be enhanced.</li> <li>Ensuring good quality drinking water is available to all consumers of public and group water supplies, in compliance with national and EU drinking water standards</li> <li>Ensuring the provision of the remaining infrastructure needed to provide secondary waste water treatment, for compliance with the requirements of the EU Urban Waste water Treatment Directive.</li> <li>Promoting water conservation through Irish Water's Capital Investment Plan, the Rural Water Programme and other measures.</li> <li>Monitoring the on-going implementation of septic tanks inspection regime and the National Inspection Plan for Domestic Waste Water Treatment Systems.</li> <li>Ensuring a fair funding model to deliver water services.</li> <li>Overseeing the establishment of an economic regulation function under the CER.</li> </ul>	with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Irish Water's Water Services Strategic Plan 2015 and associated Proposed Capital Investment Plan (2014-2016)	<ul> <li>This Water Services Strategic Plan sets out strategic objectives for the delivery of water services over the next 25 years up to 2040. It details current and future challenges which affect the provision of water services and identifies the priorities to be tackled in the short and medium term.</li> </ul>	Six strategic objectives as follows:  Meet Customer Expectations.  Ensure a Safe and Reliable Water Supply.  Provide Effective Management of Waste water.  Protect and Enhance the Environment.  Support Social and Economic Growth.  Invest in the Future.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Raised Bog SAC Management Plan and Review of Raised Bog Natural Heritage Areas	Aims to meet nature conservation obligations while having regard to national and local economic, social and cultural needs	Ensure that the implications of management choices for water levels, quantity and quality are fully explored, understood and factored into policy making and land use planning.     Review the current raised bog NHA network in terms of its contribution to the national conservation objective for raised bog habitats and determine the most suitable sites to replace the losses of active raised bog habitat and high bog areas within the SAC network and to enhance the national network of NHAs.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Strategy
Agri-vision 2015 Action Plan	Outlines the vision for agricultural industry to improve competitiveness and response to market demand while respecting and enhancing the environment	not applicable	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Agri-Food Strategy 2030	This 10-year Strategy sets out four high-level "Missions" to be achieved in order to develop such a system in Ireland:  1. A Climate Smart, Environmentally Sustainable Agri-Food Sector  2. Viable and Resilient Primary Producers with Enhanced Wellbeing  3. Food that is Safe, Nutritious and Appealing, Trusted and Valued at Home and Abroad  4. An Innovative, Competitive and Resilient Sector, driven by Technology and Talent	Each of the Missions has a set of Goals which are underpinned by a series of Actions.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Rural Environmental Protection Scheme (REPS)  Agri-Environmental Options Scheme (AEOS)  Green, Low-Carbon, Agri- environment Scheme (GLAS)	Agri-environmental funding schemes aimed at rural development for the environmental enhancement and protection.     GLAS is the new replacement for REPS and AEOS which are both expiring.	Establish best practice farming methods and production methods in order to protect landscapes and maximise conservation.     Protect biodiversity, endangered species of flora and fauna and wildlife habitats.     Ensure food is produced with the highest regard to the environment.     Implement nutrient management plans and grassland management plans.     Protect and maintain water bodies, wetlands and cultural heritage.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Rural Development Programme	The National Rural Development Programme, prepared by the Department of Agriculture, Fisheries and Food, sets out a national programme based on the EU framework for rural development and prioritises improving the competitiveness of agriculture, improving the environment and improving the quality of life in rural areas	At a more detailed level, the programme also:  Supports structural change at farm level including training young farmers and encouraging early retirement, support for restructuring, development and innovation;  Aims to improve the environment, biodiversity and the amenity value of the countryside by support for land management through funds such as Natura 2000 payments etc.; and  Aims to improve quality of life in rural areas and encouraging diversification of economic activity through the implementation of local development strategies such as non-agricultural activities	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Realising our Rural Potential: The Action Plan for Rural Development 2017	The Plan aims to unlock the potential of rural Ireland through a framework of supports at national and local level which will ensure that people who live in rural areas have increased opportunities for employment locally, and access to public services and social networks that support a high quality of life.	The Plan contains 276 actions across five key pillars. The five pillars are:  Supporting Sustainable Communities, Supporting Enterprise and Employment, Maximising our Rural Tourism and Recreation Potential, Fostering Culture and Creativity in Rural Communities, and Improving Rural Infrastructure and Connectivity.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Forestry Programme (2014-2020)	Represents Ireland's proposals for 100% State aid funding for a new Forestry Programme for the period 2014 – 2020.	Measures include the following:  Afforestation and Creation of Woodland  NeighbourWood Scheme Forest Roads Reconstitution Scheme Woodland Improvement Scheme Native Woodland Conservation Scheme Knowledge Transfer and Information Actions Producer Groups Innovative Forest Technology Forest Genetic Reproductive Material Forest Management Plans	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Strategy
River Basin Management Plan	The River Basin Management Plan sets out the measures planned to maintain and improve the status of waters.	Aim to protect and enhance all water bodies in the RBD and meet the environmental objectives outlined in Article 4 of the Water Framework Directive.     Identify and manages water bodies in the RBD.     Establish a programme of measures for monitoring and improving water quality in the RBD.     Involve the public through consultations.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Peatlands Strategy (2015-2025)	This Strategy aims to provide a long-term framework within which all of the peatlands within the State can be managed responsibly in order to optimise their social, environmental and economic contribution to the well-being of this and future generations.	Objectives of the Strategy:  To give direction to Ireland's approach to peatland management.  To apply to all peatlands, including peat soils.  To ensure that the relevant State authorities and state-owned companies that influence such decisions contribute to meeting cross-cutting objectives and obligations in their policies and actions.  To ensure that Ireland's peatlands are sustainably managed so that their benefits can be enjoyed responsible.  To inform appropriate regulatory systems to facilitate good decision making in support of responsible use.  To inform the provision of appropriate incentives, financial supports and disincentives where required.  To provide a framework for determining and ensuring the most appropriate future use of cutover and cutaway bogs.  To ensure that specific actions necessary for the achievement of its objectives are clearly identified and delivered by those involved in or responsible for peatlands management or for decisions affecting their management.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Flood Risk Management Plans arising from National Catchment Flood Risk Assessment and Management Programme	The national Catchment Flood Risk Assessment and Management (CFRAM) programme commenced in Ireland in 2011 and is being overseen by the Office of Public Works. The CFRAM Programme is intended to deliver on core components of the National Flood Policy, adopted in 2004, and on the requirements of the EU Floods Directive.	CFRAM Studies have been undertaken for all River Basin Districts. The studies are focusing on areas known to have experienced flooding in the past and areas that may be subject to flooding in the future either due to development pressures or climate change. Flood Risk and Hazard mapping, including Flood Extent Mapping, was finalised in 2017. The final outputs from the studies are the CFRAM Plans, finalised in 2018. The Plans define the current and future flood risk in the River Basin Districts and set out how this risk can be managed.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Draft National Bioenergy Plan 2014 - 2020	The Draft Bioenergy Plan sets out a vision as follows: Bioenergy resources contributing to economic development and sustainable growth, generating jobs for citizens, supported by coherent policy, planning and regulation, and managed in an integrated manner.	Three high level goals, of equal importance, based on the concept of sustainable development are identified:  To harness the market opportunities presented by bioenergy in order to achieve economic development, growth and jobs.  To increase awareness of the value, opportunities and societal benefits of developing bioenergy.  To ensure that bioenergy developments do not adversely impact the environment and its living and non-living resources.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Draft Renewable Electricity Policy and Development Framework (DCCAE) 2016	Goal: To optimise the opportunities in Ireland for renewable electricity development on land at significant scale, to serve both the All Island Single Electricity Market and any future regional market within the European Union, in accordance with European and Irish law, including Directive 2009/28/EC: On the promotion of the use of energy from renewable resources.	Objective: To develop a Policy and Development Framework for renewable electricity generation on land to serve both the All Island Single Electricity Market and any future regional market within the European Union, with particular focus on large scale projects for indigenous renewable electricity generation. This will, inter alia, provide guidance for planning authorities and An Bord Pleanála.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Alternative Fuels Infrastructure for the Transport Sector (DTTAS) 2017- 2030	This Framework sets targets to achieve an appropriate level of alternative fuels infrastructure for transport, which is relative to national policy and Irish market needs. Non-infrastructure-based incentives to support the use of the infrastructure and the uptake of alternative fuels are also included within the scope of the Framework.	Targets for alternative fuel infrastructure include the following:      AFV forecasts     Electricity targets     Natural gas (CNG, LNG) targets     Hydrogen targets     Biofuels targets	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Strategy
		LPG targets	cumulatively contribute towards – in combination with
		Synthetic and paraffinic fuels targets	other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Food Wise 2025 (DAFM)	Food Wise 2025 sets out a ten-year plan for the agri-food sector. It underlines the sector's unique and special position within the Irish economy, and it illustrates the potential which exists for this sector to grow even further.	Food Wise 2025 identifies ambitious and challenging growth projections for the industry over the next ten years including:  ■ 85% increase in exports to €19 billion.  ■ 70% increase in value added to €13 billion.  ■ 60% increase in primary production to €10 billion.  ■ The creation of 23,000 additional jobs all along the supply chain from producer level to high-end value-added product development.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Tourism Action Plan 2019-2021	The Tourism Action Plan 2019-2021 sets out actions that the Tourism Leadership Group has identified as priorities to be progressed until 2021 in order to maintain sustainable growth in overseas tourism revenue and employment. Each action involves specific tourism stakeholders, both in the public and private sectors, all of whom we expect to proactively work towards the completion of actions within the specified timeframe.	The Plan contains 27 actions focusing on the following areas:  Policy Context  Marketing Ireland as a Visitor Destination Enhancing the Visitor Experience Research in the Irish Tourism Sector Supporting Local Communities in Tourism Wider Government Policy International Context Co-ordination Structures	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Tourism Policy Statement: People, Place and Policy – Growing Tourism to 2025	The main goal of this policy statement is to have a vibrant, attractive tourism sector that makes a significant contribution to employment across the country; is economically, socially and environmentally sustainable; helps promote a positive image of Ireland overseas, and is a sector in which people want to work.	The Tourism Policy Statement sets three headline targets to be achieved by 2025:  ■ Overseas tourism revenue of €5 billion per year  ■ net of inflation excluding carrier receipts;  ■ 250,000 people employed in tourism; and  ■ 10 million overseas visitors to Ireland per year.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Draft Renewable Electricity Policy and Development Framework (DCCAE)	Goal: To optimise the opportunities in Ireland for renewable electricity development on land at significant scale, to serve both the All Island Single Electricity Market and any future regional market within the European Union, in accordance with European and Irish law, including Directive 2009/28/EC: On the promotion of the use of energy from renewable resources.	Objective: To develop a Policy and Development Framework for renewable electricity generation on land to serve both the All Island Single Electricity Market and any future regional market within the European Union, with particular focus on large scale projects for indigenous renewable electricity generation. This will, inter alia, provide guidance for planning authorities and An Bord Pleanála.  Methodology: Development of the Policy and Development Framework is to be informed by the carrying out of an SEA, including widespread consultation with stakeholders and public, and with AA under the Habitats Directive.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
People Place and Policy - Growing Tourism to 2025, (DTTAS, 2014)	Growing Tourism to 2025 is a policy framework for the development of tourism within the Country.	The framework establishes the overall tourism goal of Government;  • Employment in the tourism sector will be 250,000 by 2025, compared with around 200,000 at present.  • There will be 10 million visits to Ireland annually by 2025.  The Government's ambition is that overseas tourism revenue will reach €5 billion in real terms by 2025.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Waterways Ireland Heritage Plan 2016-2020	The overarching aim of the Plan is to: "Identify and protect the unique waterways heritage and promote its sustainable use for the enjoyment of this and future generations".	Four objectives of the Plan include the following:         Objective 1: Fostering partnerships to continue building waterway heritage knowledge through storing information, undertaking research and developing best practice.         Objective 2: Promoting awareness, appreciation and enjoyment of our waterway heritage with a focus on community engagement.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with

	Appropriate Assessment of the Draft II	anaport Strategy for the Greater Dubin Area 2022-2042	
Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Strategy
		<ul> <li>Objective 3: Promoting the integrated management, conservation, protection and sustainable use of the inland navigable waterway asset.</li> <li>Objective 4: To develop Waterways Ireland as a heritage organisation committed to achieving the aim of this plan.</li> </ul>	other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Tourism Development and Innovation – A Strategy for Investment 2016-2022, (Fáilte Ireland, 2016)	This strategy sets out the framework and mechanism for the delivery of investment to cities, towns, villages, communities and businesses across the country. It identifies priorities to support innovation in the sector to retain and grow the country's competitiveness in the marketplace. Its ultimate aim is to strengthen the appeal of Ireland for international visitors.	The objectives of the Tourism Development and Innovation Strategy are:  To successfully and consistently deliver a world class visitor experience; To support a tourism sector that is profitable and achieves sustainable levels of growth and delivers jobs; To facilitate communities to play an enhanced role in developing tourism in their locality, thereby strengthening and enriching local communities; and To recognise, value and enhance Ireland's natural environment as the cornerstone of Irish tourism.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Aquaculture Acts 1997 to 2006 (Sea-Fisheries and Maritime Jurisdiction Act 2006 (8/2006), s. 1(3)) Fisheries (Amendment) Act 1997 (23/1997) Fisheries and Foreshore (Amendment) Act 1998 (54/1998), ss. 2, 3 and 4 Fisheries (Amendment) Act 2001 (40/2001) Sea-Fisheries and Maritime Jurisdiction Act 2006 (8/2006)	The Aquaculture and Foreshore Management Division ensures the efficient and effective management of Aquaculture licensing and Foreshore licensing in respect of Aquaculture and Sea Fishery related activities.	The Strategic Objectives of the Aquaculture and Foreshore Management Division are:  to develop and manage an efficient and effective regulatory framework in respect of Aquaculture licensing and Foreshore licensing of Aquaculture and Sea Fishery related activities;  to secure a fair financial return from the State's foreshore estate in the context of Aquaculture licensing and Foreshore licensing in respect of Aquaculture and Sea Fishery related activities;  to progressively reduce arrears in the clearing of licence applications.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Foreshore Acts 1933 to 2011	The Foreshore Acts require that a lease or licence must be obtained from the Minister for Housing, Planning and Local Government for the carrying out of works or placing structures or material on, or for the occupation of or removal of material from, State-owned foreshore, which represents the greater part of the foreshore. Construction of permanent structures on privately owned foreshore also required the prior permission of the Minister under the Foreshore Act.	<ul> <li>Developments on the foreshore require planning permission in addition to a Foreshore Lease/Licence/Permission. All Foreshore Leases, Licences</li> <li>Permissions are without prejudice to the powers of the local planning authority. Applicants should, therefore, consult initially with the local planning authority regarding their proposal.</li> <li>In the case of developments on foreshore for, by or on behalf of a Local Authority where an EIS is required, applications should be made to An Bord Pleanála under Part XV, Planning and Development Act 2000.</li> </ul>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Marine Planning Development Management Bill (General Scheme), 2019	The Bill seeks to establish in law a completely new regime for the maritime area which will replace existing State and development consent regimes and streamline arrangements on the basis of a single consent principle.	One of the aims is to establish a legal basis for An Bord Pleanála and coastal local authorities to consent to development in the maritime area, while retaining existing foreshore and planning permission provisions for aquaculture and sea fisheries related development. It will also provide for a single environmental impact assessment (EIA) and a single appropriate assessment (AA), where applicable.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Marine Planning Framework (NMPF)	The NMPF details how marine activities will interact with each other in an ocean space that is under increasing spatial pressure, ensuring the sustainable use of Ireland's marine resources to 2040.  The NMPF has been prepared with an ecosystem-based approach and informed by best available knowledge.	The National Marine Planning Framework (NMPF) brings together all marine-based human activities for the first time, outlining the Government's vision, objectives and marine planning policies for each marine activity.  The NMPF is intended as the marine equivalent to the National Planning Framework. This approach will enable the Government to:  • set a clear direction for managing our seas • clarify objectives and priorities direct decision makers, users and stakeholders towards strategic, plan-led, and efficient use of our marine resources	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Seafood Operational Programme (2014-2020)	The Operational Programme (OP) supported by the European Maritime and Fisheries Fund (EMFF) in Ireland aims at achieving key national development priorities along with the EU's "Europe 2020" objectives. The OP supports the general reform of the EU's Common Fisheries Policy (CFP) and the development of its Integrated Maritime Policy (IMP) in Ireland.	The Irish OP is organised around the priorities including:  ■ Union Priority 1 (UP1): €67 million (28% of the total allocation) aim at assuring the sustainable development of fishing activities, while protecting the marine environment.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in- combination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and

Logislation Dlan sta	Cummery of high level aim / purpose / abicative	Summery of lower level chicetives, estimates	Delevance to the Strategy
Legislation, Plan, etc.  Harnessing Our Ocean Wealth: An	Summary of high-level aim/ purpose/ objective  The OP strategy is designed around the Irish national priorities in the agri-food sector: 'Act Smart' by encouraging knowledge and innovation, 'Think Green' through a responsible and sustainable use of resources, 'Achieve Growth' in order to maintain and create jobs.  Harnessing Our Ocean Wealth is an Integrated Marine Plan (IMP), setting out a	Summary of lower level objectives, actions etc.  Union Priority 2 (UP2): €30 million (12% of the total allocation) will support the Irish National Strategic Plan for Aquaculture that aims at boosting the competitiveness of the aquaculture sector.  Union Priority 3 (UP3): €84.8 million (35.4% of the total allocation) will go towards compliance with CFP rules regarding control and data collection.  Sustainable economic growth of marine/ maritime sectors;	Relevance to the Strategy  cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.  Where new land use developments or activities occur
Integrated Marine Plan for Ireland 2012	roadmap for the Government's vision, high-level goals and integrated actions across policy, governance and business to enable our marine potential to be realised. Implementation of this Plan will see Ireland evolve an integrated system of policy and programme planning for our marine affairs.	Increase the contribution to the national GDP; Deliver a business friendly yet robust governance, policy and planning framework; Protect and conserve our rich marine biodiversity and ecosystems; Manage our living and non-living resources in harmony with the ecosystem; Implement and comply with environmental legislation; Building on our maritime heritage, strengthen our maritime identity; Increase our awareness of the value, opportunities and societal benefits; and Engagement and participation by all.	as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
All Ireland Pollinator Plan 2015- 2020 and 2021-2025 (in preparation)	The All-Ireland Pollinator Plan is an island-wide attempt to reverse declines in pollinating insects in order to ensure the sustainability of our food, avoid additional economic impacts on agriculture, and protect the health of the environment.	The main objectives include:      Making farmland, public land and private land in Ireland pollinator friendly;     Raising awareness of pollinators and how to protect them;     Managed pollinators – supporting beekeepers and growers;     Expanding our knowledge of pollinators and pollination service; and     Collecting evidence to track change and measure success.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Regional/ County/Local Level			
Eastern and Midland Regional Economic and Spatial Strategy 2019-2031	The Regional Spatial and Economic Strategy provides a long-term strategic planning and economic framework for the Eastern and Midlands Region in order to support the implementation of the National Planning Framework.	The Eastern and Midland Regional Economic and Spatial Strategy includes provisions for its 12 constituent local authorities: Fingal County Council; Dublin City Council; South Dublin County Council; Dún Laoghaire-Rathdown County Council; Louth County Council; Kildare County Council; Meath County Council; Wicklow County Council; Longford County Council; Laois County Council; Offaly County Council; and Westmeath County Council.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Integrated Implementation Plan 2019-2024	The priorities in the Integrated Infrastructure Plan align with the objectives and priorities set out in the Greater Dublin Transport Strategy 2016-2035, focused on improving public and sustainable transport. While the bulk of the Plan relates solely to the Greater Dublin Area, certain areas such as public transport services and activities related to small public service vehicles are dealt with on a national basis.	The Implementation Plan identifies investment proposals for a number of areas including:  Bus  Light Rail; Heavy Rai; Integration Measures and Sustainable Transport Investment; Integrated Service Plan; and Integration and Accessibility.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Greater Dublin Area (GDA) Transport Strategy (2016-2035)	This Strategy sets out how transport will be developed across the Greater Dublin Area, covering Dublin, Meath, Wicklow and Kildare. Vision Statement: "The GDA by 2022 is an economically vibrant, active and sustainable international Gateway Region, with strong connectivity across the GDA Region, nationally and worldwide; a region which fosters communities living in attractive, accessible places well supported by community infrastructure and enjoying high quality leisure facilities; and promotes and protects across the GDA green corridors, active agricultural lands and protected natural areas."  Full SEA and Stage 2 AA have been undertaken on this Strategy.	Core principles deriving from the strategic vision:  Dublin as the capital city of Ireland and a major European centre shall grow and progress, competing with other cities in the EU, and serving a wide range of international, national, regional and local needs.  The Dublin and Mid-East Regions will be attractive, vibrant locations for industry, commerce, recreation and tourism and will be a major focus for economic growth within the Country.  The GDA, through its ports and airport connections will continue to be the most important entry/exit point for the country as a whole, and as a Gateway between the European Union and the rest of the World. Access to and through the GDA will continue to be a matter of national importance.  Development in the GDA shall be directly related to investment in integrated high-quality public transport services and focused on compact urban form.  Development within the existing urban footprint of the Metropolitan Area will be consolidated to achieve a more compact urban form	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Strategy
		<ul> <li>Development in the Hinterland Area will be focused on the high-quality integrated growth and consolidation of development in key identified towns, separated from each other by extensive areas of strategic green belt land devoted to agriculture and similar uses.</li> </ul>	
NPWS Conservation Plans and/or Conservation Objectives for SACs and SPAs	Management planning for nature conservation sites has a number of aims. These include:  To identify and evaluate the features of interest for a site  To set clear objectives for the conservation of the features of interest  To describe the site and its management  To identify issues (both positive and negative) that might influence the site  To set out appropriate strategies/management actions to achieve the objectives	Conservation objectives for SACs and SPAs (i.e. sites within the Natura 2000 network) have to be set for the habitats and species for which the sites are selected.     These objectives are used when carrying out appropriate assessments for plans and projects that might impact on these sites.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Groundwater Protection Schemes	A Groundwater Protection Scheme provides guidelines for the planning and licensing authorities in carrying out their functions, and a framework to assist in decision-making on the location, nature and control of developments and activities in order to protect groundwater.	A Groundwater Protection Scheme aims to maintain the quantity and quality of groundwater, and in some cases improve it, by applying a risk assessment-based approach to groundwater protection and sustainable development.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Land Use Plans (including Development Plans, Local Area Plans and Strategic Development Zone Planning Schemes) in force within the Strategy area and in other adjoining planning authorities	<ul> <li>Outline planning objectives for land use development.</li> <li>Strategic framework for planning and sustainable development including those set out in National Planning Framework and the Regional Economic and Spatial Strategy.</li> <li>Set out the policies and proposals to guide development in the relevant area.</li> </ul>	Identify future infrastructure, development and zoning required.     Protect and enhances amenities and environment.     Guide planning authority in assessing proposals.     Aim to guide development in the area and the amount of nature of the planned development.     Aim to promote sustainable development.     Provide for economic development and protect natural environmental, heritage.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Local Economic and Community Plans (LECPs) prepared by Local Authorities within the Strategy area and Local Authorities in adjoining counties	The overarching vision for each LECP is: "to promote the well-being and quality of life of citizens and communities	The purpose of the LECP, as provided for in the Local Government Reform Act 2014, is to set out, for a six-year period, the objectives and actions needed to promote and support the economic development and the local and community development of the relevant local authority area, both by itself directly and in partnership with other economic and community development stakeholders.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Landscape Character Assessments within the Strategy area and in adjoining counties	Characterises the geographical dimension of the landscape.	Identifies the quality, value, sensitivity and capacity of the landscape area.     Guides strategies and guidelines for the future development of the landscape.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Noise Action Plans prepared by Local Authorities within the Strategy area and Local Authorities in adjoining counties	Noise Action Plans are prepared in accordance with the requirements of the Environmental Noise Regulations 2006, Statutory Instrument 140 of 2006. These Regulations give effect to the EU Directive 2002/49/EC relating to the assessment and management of environmental noise. This Directive sets out a process for managing environmental noise in a consistent manner across the EU and the Noise Regulations set out the approach to meeting the requirements of the Directive in Ireland.	The main purpose of Noise Action Plans is to: Inform and consult the public about noise exposure, its effects and the measures which may be considered to address noise problems Address strategic noise issues by requiring competent authorities to draw up action plans to manage noise issues and their effects Reduce noise, where possible, and maintain the environmental acoustic quality where it is good	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Strategy
			achievement of the objectives of the regulatory framework for environmental protection and management.
Climate Adaptation Strategies prepared by Local Authorities within the Strategy area and Local Authorities in adjoining counties	Climate Change Adaptation Strategies represent a proactive step by Local Authorities in the process of adaptation planning to build resilience and respond effectively to the threats posed by climate change.	The Climate Change Adaptation Strategies takes on the role as the primary instrument at local level to:  • Ensure a proper comprehension of the key risks and vulnerabilities of climate change;  • Bring forward the implementation of climate resilient actions in a planned and proactive manner; and  • Ensure that climate adaptation considerations are mainstreamed into all plans and policies and integrated into all operations and functions of County Council.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Local Authority Renewable Energy Strategy (LARES) prepared by Local Authorities within the Strategy area and Local Authorities in adjoining counties	The Strategy sets out the framework for the delivery of sustainable and renewable energies throughout the County.	The LARES outlines the potential for a range of renewable energy resources and developments and acknowledges the significant contribution that they can make to the county in terms of energy security, reduced reliance on traditional fossil fuels, enabling future energy exports, meeting assigned national targets and the transition to a low carbon economy.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Eastern and Midlands Regional Waste Management Plan 2015-2021	These plans give effect to national and EU waste policy, and address waste prevention and management (including generation, collection and treatment) over the period 2015-2021.	To manage wastes in a safe and compliant manner, a clear strategy, policies and actions are required.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Fáilte Ireland Tourism plans, strategies, including those relating to the Ireland's Ancient East and Dublin: A Breath of Fresh Air/Come Here To Me Dublin brands	Fáilte Ireland's work includes preparing various plans and strategies for Ireland's Hidden Heartlands, the Wild Atlantic Way, Ireland's Ancient East and other brands and initiatives. These plans are subject to their own environmental assessment processes and any project arising is required to be consistent with and conform with the provisions of all adopted/approved Statutory Policies, Strategies, Plans and Programmes, including provisions for the protection and management of the environment.	Some of Fáilte Ireland's plans and strategies include various projects relating to land use and infrastructural development, including those relating to development of land or on land and the carrying out of land use activities. Many of these projects exist already while some are not currently in existence.  The Statutory Policies, Strategies, Plans and Programmes that provide for different projects undergo a variety of environmental assessments. These assessments ensure that environmental effects are considered, including: those arising from new and intensified uses and activities; and those arising from various sectors such as tourism.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Various existing, planned and emerging projects provided for by the above plans and programmes	These projects have been provided for by higher-level plans and programmes.	These projects will contribute towards the development of the area to which the Plan relates and/or wider area and will contribute towards environmental protection and management.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 3.4 and 4.3.1) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.