

SEA ENVIRONMENTAL REPORT

FOR THE

DUNDRUM LOCAL AREA PLAN 2023

for: Dún Laoghaire-Rathdown County Council

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List of Abbreviations

AA Appropriate Assessment

ABTA Area Based Transport Assessment
ACA Architectural Conservation Area

CAFE Cleaner Air for Europe

CORINE Catchment Flood Risk Assessment and Management Co-ORdinated Information on the Environment

CSO Central Statistics Office

DART Dublin Area Rapid Transit

DCHG Department of Culture, Heritage and the Gaeltacht

DECC Department of Environment, Climate and Communications

DEHLG Department of the Environment, Heritage and Local Government

DHLGH Department of Housing, Local Government and Heritage

EIA Environmental Impact Assessment

EMRA Eastern and Midland Regional Assembly

EPA Environmental Protection Agency
EQS Environmental Quality Standard

EU European Union

GSI Geological Survey of Ireland

LA Local Authority

NHA Natural Heritage Area

NIAH National Inventory of Architectural Heritage

NTA National Transport Authority

OPW Office of Public Works

MASP Metropolitan Area Strategic Plan pNHA proposed Natural Heritage Area

PAS Priority Action Substance

RAL Remedial Action List
RBD River Basin District

RMP Record of Monuments and Places

RPA Register of Protected Areas

RSES Regional Spatial and Economic Strategy

SAC Special Area of Conservation

SEA Strategic Environmental Assessment
SEO Strategic Environmental Objective
SI No. Statutory Instrument Number

SPA Special Protection Area

TPOs Tree Preservation Orders

UNESCO United Nations Educational, Scientific and Cultural Organisation

WHO World Health OrganisationWFD Water Framework DirectiveWWTP Waste Water Treatment Plant

Glossary

Appropriate Assessment

The obligation to undertake Appropriate Assessment (AA) derives from Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC. AA is a focused and detailed impact assessment of the implications of a strategic action (such as a plan or programme) or project, alone and in combination with other strategic actions and projects, on the integrity of a European Site in view of its conservation objectives.

Biodiversity and Flora and Fauna

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

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

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

Environmental Problems

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

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

Environmental Vectors

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

Mitigate

To make or become less severe or harsh.

Mitigation Measures

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

In the context of Article 6 of the Habitats Directive, mitigation measures are clearly distinguished from compensatory measures. Compensatory measures are intended to offset the negative effects of the plan or project so that the overall ecological coherence of the Natura 2000 Network is maintained.

Natural Heritage

The Heritage Act (1995) defines natural heritage as including flora, fauna, wildlife habitats, landscapes, seascapes, wrecks, geology, inland waterways, heritage gardens and parks.

Protected Structure

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

Recorded Monument

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

Scoping

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

Strategic Environmental Assessment (SEA)

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

Strategic Environmental Objective (SEO)

Strategic Environmental Objectives (SEOs) are methodological measures developed from policies which generally govern environmental protection objectives established at International, Community or Member State level and are used as standards against which the provisions of the Plan and the alternatives can be evaluated in order to help identify which provisions would be likely to result in significant environmental effects and where such effects would be likely to occur, if - in the case of adverse effects - unmitigated.

Section 1 SEA: Introduction and Benefits

1.1 Introduction

This is the Strategic Environmental Assessment (SEA) Environmental Report for the Dundrum Local Area Plan 2023. It has been undertaken by CAAS Ltd. on behalf of Dún Laoghaire-Rathdown County Council. The purpose of this report is to provide a clear understanding of the likely environmental consequences of decisions regarding the adoption and implementation of the Plan.

Environmental assessment is a procedure that ensures that the environmental implications of decisions are taken into account before such decisions are made. Environmental Impact Assessment, or EIA, is generally used for describing the process of environmental assessment for individual projects, while Strategic Environmental Assessment or SEA is the term which has been given to the environmental assessment of plans programmes, which help determine the nature and location of individual projects taking place. SEA is a systematic process of predicting and evaluating the likely significant environmental effects of implementing a proposed plan or programme, in order to ensure that these effects are adequately addressed at the earliest appropriate stages of decision-making in tandem with economic, social and other considerations.

The SEA has been undertaken in order to comply with European SEA Directive¹, and transposing Regulations, which introduced the requirement that SEA be carried out on plans and programmes that are prepared for a number of sectors, including land use planning. Under the Planning and Development (SEA) Regulations 2004 (S.I. No. 436 of 2004) as amended by the Planning and Development (SEA) (Amendment) Regulations 2011, (S.I. No. 201 of 2011), there is a requirement for Strategic Environmental Assessment (SEA) of all Local Area Plans for areas that have a population or target population of 5,000 persons or more. The Dundrum LAP area has a

population exceeding this threshold; therefore, SEA is required as a part of the Plan-making process.

1.2 Implications for the Planning Authority

SEA identifies the likely significant environmental effects of implementing the Plan. The findings of the SEA are expressed in this Environmental Report, an earlier version of which accompanied the Draft Plan on public display and has been updated following consultation, and identifies how environmental considerations were integrated into the Plan and how alternatives for the Plan were considered.

The planning authority has taken into account the findings of this report and other related SEA output during the Plan preparation process.

Following adoption of the Plan, an SEA Statement is prepared that summarises, inter alia, how environmental considerations have been integrated into the Plan.

1.3 Why SEA? The Benefits

SEA is the planning authority's and the public's guide to what are generally the best areas for development in the town.

SEA enables the planning authority to direct development towards robust, well-serviced and connected areas— thereby facilitating the general avoidance of incompatible development in the most sensitive, least well-serviced and least well-connected areas.

SEA provides greater certainty to the public and to developers. Plans are more likely to be adopted without delays or challenges and planning applications are more likely to be

European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011 (SI No. 200 of 2011), and the Planning and Development (SEA) Regulations 2004 (SI No. 436 of 2004), as amended by the Planning and Development (SEA) (Amendment) Regulations 2011 (SI No. 201 of 2011).

¹ Directive 2001/42/EC of the European Parliament and of the Council of Ministers, of 27th June 2001, on the assessment of the effects of certain plans and programmes on the environment, transposed into Irish Law through the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (SI No. 435 of 2004), as amended by the

granted permission. Environmental mitigation is more likely to cost less.

The Plan directs incompatible development away from the most sensitive areas of Dundrum. Development of generally more robust, well-serviced and well-connected areas of the Dundrum area will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation.

Compact development can be accompanied by placemaking initiatives to enable Dundrum to become a more desirable place to live – so that it maintains populations and services.

Compatible sustainable development in Dundrum's more environmentally sensitive areas is also provided for, subject to various requirements relating to environmental protection and management being met.

Section 2 The Plan

2.1 Introduction

Dún Laoghaire-Rathdown County Council has adopted a Local Area Plan (LAP) for Dundrum under the Planning and Development Act 2000 (as amended). The Plan sets out an overall strategy for the proper planning and sustainable development over the years 2023.

LAPs are required to be consistent with the Policy and Objectives of the County Development Plan and its Core Strategy, as well as the National Planning Framework and Regional Spatial Economic Strategies.

The LAP should be read in conjunction with the Dún Laoghaire-Rathdown County Development Plan 2022-2028, which sets out the overarching development strategy for the administrative area of Dún Laoghaire-Rathdown County Council. Where conflicting policies and objectives arise between the LAP and the CDP in relation to SEA and AA matters the CDP shall take precedence.

2.2 Summary of the Plan

The LAP sets out an overall strategy for the proper planning and sustainable development of Dundrum in the context of Project Ireland 2040, the National Planning Framework, the Regional Spatial and Economic Strategy for the Eastern and Midland Region and the County Development Plan. It is informed by Ministerial Guidelines issued pursuant to Section 28 of the Act together with EU requirements regarding SEA and AA.

The LAP looks at both existing and future Dundrum and aims to set out a framework to guide future development and make sure that there are enough schools, open spaces, childcare and community facilities, shops and employment to serve the needs of the community.

As a Major Town Centre Dundrum plays a very important role in the County and whilst the LAP covers a relatively small area, Dundrum as a town, while serving the local need, also has a much wider draw in terms of the shops, educational facilities, and civic, cultural and

community facilities that currently exist and that will exist in the future.

An analysis of population has indicated that the population of the plan area could double over the next 20 years from circa 6,000 to circa 11,500 persons. The majority of new homes will be in apartment or duplex type units with the minority in more traditional style houses.

At the heart of the Plan is the "ten minute neighbourhood" concept whereby a person should be able to walk, cycle or use high quality public transport to access the various amenities listed above within ten minutes of their home. The Luas and planned bus routes mean that Dundrum has the potential to reach a much wider area. An Area Based Transport Assessment (ABTA) has fed into the Local Area Plan policy formulation.

The LAP is set out in nine chapters, setting out various Plan provisions, as follows:

- 1. Introduction, Context and Analysis (including Vision)
- 2. Urban Framework and Site Development Frameworks
- 3. People and Homes
- 4. Transport and Movement
- 5. Climate Change Adaptation and Mitigation
- 6. Multifunctional Towns and Neighbourhood Centres
- 7. Employment
- 8. Heritage and Conservation
- 9. Implementation and Monitoring

The vision for Dundrum is of a vibrant, inclusive, sustainable and attractive town which is connected to and supports surrounding neighbourhoods and functions as a place people can enjoy, to live in, work in and visit.

2.3 Strategic work undertaken by the Council to ensure contribution towards environmental protection and sustainable development

In advance of the placing of the Draft Plan on public display, Dún Laoghaire-Rathdown County Council undertook various works in order to inform the preparation of the Plan. This included a detailed population analysis and preparation of an Area Based Transport Analysis, which has informed the Plan.

The findings of this strategic work have been integrated into the Plan and will contribute towards both environmental protection and management and sustainable development.

The undertaking of this SEA process was part of this strategic work and contributed towards the integration of environmental considerations into individual Plan provisions as detailed in Section 9 of this report.

2.4 Relationship with other relevant Plans and Programmes

It is acknowledged that many of the major issues affecting Dundrum's development are contingent on national policy and government funding.

The Plan sits within a hierarchy of statutory documents setting out public policy for, among other things, land use planning, infrastructure, development, sustainable tourism, environmental protection and environmental management. The Plan must comply with relevant higher-level strategic actions and may, in turn, guide lower-level strategic actions. documents include plans programmes such as those detailed in Appendix I² (see also, Section 4 "Environmental Baseline", Section 5 "Strategic Environmental Objectives", Section 6 "Description

Alternatives" and Section 9 "Mitigation Measures"). These documents have been subject to their own environmental assessment processes, as relevant.

The National Planning Framework (NPF) sets out Ireland's planning policy direction up to 2040. The NPF is to be implemented through Regional Spatial and Economic Strategies (RSESs) and lower tier Development Plans and Local Area Plans. The RSES for the Eastern and Midland Region sets out objectives for land use infrastructure. planning, sustainable development, environmental protection and environmental management that have been subject to environmental assessment and must be implemented through the Dún Laoghaire-Rathdown County Development Plan 2022-2028, which sets out the overarching development strategy for the administrative area of Dún Laoghaire-Rathdown County Council, and the Local Area Plan.

In order to be realised, projects included in the Local Area Plan (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.

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.

² Appendix I 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

Section 3 SEA Methodology

3.1 Introduction to the Iterative Approach

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

3.2 Appropriate Assessment and Integrated Biodiversity Impact Assessment

3.2.1 Appropriate Assessment

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

As part of the AA Screening process, the Council determined that it could not be excluded, on the basis of objective information, that the emerging Draft Plan, individually, or in combination with other plans and projects would have a likely adverse effect on the integrity of a European Site. Therefore, Stage 2 AA was required.

The conclusion of the Stage 2 AA is that, following the application of mitigation, the Plan will not affect the integrity of the European Sites, alone or in combination with other plans or projects.³ The preparation of the Plan, SEA and AA has taken place concurrently and the findings of the AA have informed the SEA.

3.2.2 Integrated Biodiversity Impact Assessment

Many elements of Integrated Biodiversity Impact Assessment as detailed in the EPA's (2013) Practitioner's Manual have been aligned with in the undertaking of the SEA for the Plan. These include:

Scoping

- Biodiversity-relevant issues were identified for consideration at scoping stage and these are now detailed in Section 4.
- Reference to a zone of influence is provided at Section 4.

Baseline

- Biodiversity data sources relevant for this local level assessment have been identified and datasets collated/gathered.
- The biodiversity baseline addresses designated sites and other habitats and species of ecological value.
- AA information has been incorporated into the SEA baseline.

Alternatives

 Impacts upon biodiversity are considered under each of the alternatives and potential conflicts can be mitigated.

Impact assessment

 Effects on biodiversity are identified and assessed and the AA considers the interrelationship between biodiversity and potential effects on European Sites.

Mitigation and monitoring

- Taking into account all measures contained within the Plan, all the proposed mitigation measures deriving from the various processes were generally consistent and compatible.
- Indicators and associated targets have been included in SEA for monitoring European Sites.

Reporting

- This SEA ER addresses all biodiversity-related considerations relevant for this level of assessment.
- This SEA ER contains all biodiversity-relevant information, data, figures and maps relevant for this level of assessment.
- This SEA ER has been informed by the AA findings.

Communication and consultation

- Submissions received have been taken on board.
- The preparation of the Plan, SEA and AA have taken place concurrently and the findings of the AA have informed the SEA.

 $^{^{\}rm 3}$ 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 $\operatorname{proceed}$; and

⁽c) adequate compensatory measures in place.

3.3 Strategic Flood Risk Assessment

A Strategic Flood Risk Assessment (SFRA) document accompanies this SEA Environmental Report and the Plan. Requirements in relation to SFRA are provided under 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (Department of Environment and Office of Public Works, 2009) and associated Department of the Environment, Community and Local Government Circular PL2/2014.

Flood risk management and drainage provisions are already in force through the Development Plan and related provisions have been integrated into the LAP.

3.4 Scoping

The scope of environmental issues to be dealt with by the SEA together with the level of detail to which they are addressed was broadly decided upon taking into account the collection of environmental baseline data and input from environmental authorities. Scoping allowed the SEA to become focused upon key issues relevant to the environmental components that are specified under the SEA Directive⁴.

All relevant environmental authorities identified under the SEA Regulations as amended, were sent SEA scoping notices by the Council indicating that submissions or observations in relation to the scope and level of detail of the information to be included in the environmental report could be made to the Council⁵.

As the Plan is not likely to have significant effects on the environment in another Member State, transboundary consultations as provided for by Article 7 of the SEA Directive were not undertaken.

Submissions made by the environmental authorities influenced the scope of the assessment undertaken, the findings of which are included in this report.

The SEA Directive requires that reasonable alternatives (taking into account the objectives and the geographical scope of the plan or programme) are identified, described and evaluated for their likely significant effects on the environment. In accordance with this requirement, alternatives for the Plan are identified and assessed in Sections 6 and 7.

3.6 Environmental Report

This SEA Environmental Report predicts and evaluates the likely environmental effects of implementing the Plan and relevant alternatives. The Environmental Report provides the Council, stakeholders and the public with a clear understanding of the likely environmental consequences of the Plan.

Mitigation measures to prevent or reduce significant adverse effects posed by the Plan are identified in Section 9 - these have been integrated into the Plan.

An earlier version of this report was report was updated in order to take account of changes that were made to the original, Draft Plan that was placed on public display.

The Environmental Report is required to contain the information specified in Schedule 2B of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004), as amended (see Table 3.1).

No significant difficulties have been encountered during the undertaking of the assessment.

^{3.5} Alternatives

⁴ These components comprise biodiversity, fauna, flora, population, human health, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors.

⁵ The following authorities were notified: Environmental Protection Agency; Department of Environment, Climate and Communications; Department of Agriculture, Food and the Marine; Department of Housing, Local Government and Heritage; South Dublin County Council; Dublin City Council; and Wicklow County Council.

3.7 SEA Statement

On finalisation of the Plan, an SEA Statement is prepared that includes information on:

- How environmental considerations have been integrated into the Plan, highlighting the main changes to the Plan that resulted from the SEA process;
- How the SEA Environmental Report and consultations have been taken into account, summarising the key issues raised in consultations and in the Environmental Report indicating what action was taken in response;
- The reasons for choosing the Plan in the light of the other alternatives, identifying the other alternatives considered, commenting on their potential effects and explaining why the Plan as adopted was selected; and
- The measures decided upon to monitor the significant environmental effects of implementing of the Plan.

Table 3.1 Checklist of Information included in this Environmental Report

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

Section 4 Environmental Baseline

4.1 Introduction

Reflecting the specifications in the SEA Directive, the relevant aspects of the current state of the environment for the following environmental components are described in this section: biodiversity and flora and fauna, population and human health, soil, water, air and climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors.

This description includes information that is relevant to lower tier planning, environmental assessments and decision-making⁶.

4.2 National Reporting on the Environment

The EPA's "Ireland's Environment – An Assessment 2020" report provides an integrated assessment of the overall quality of Ireland's environment, the pressures being placed on it and the societal responses to current and emerging environmental issues. This report has informed various parts of the environmental baseline provided below. The key environmental challenges or messages identified by the report are:

Environmental Policy Position

A national policy position for Ireland's Environment.

Full implementation

Full implementation of existing environmental legislation and a review of the governance around the coordination on environmental protection across public bodies.

Health and Wellbeing

Protecting the Environment is an Investment in Our Health and Wellbeing.

Climate

Systemic change is required for Ireland to become the climate-neutral and climate resilient society and economy that it aspires to be.

⁶ Note that Article 5 of the SEA Directive, in accordance with the established European principle of subsidiarity, requires that the Environmental Report includes the information that may reasonably

Air Quality

Adoption of measures to meet the World Health Organization air quality guideline values should be the target to aim for in the Clean Air Strategy.

Nature

Safeguard nature and wild places as a national priority and to leave a legacy for future generations.

Water Quality

Improve the water environment and tackle water pollution locally at a water catchment level.

Marine

Reduce the human-induced pressures on the marine environment.

Clean Energy

Ireland needs to move rapidly away from the extensive use of fossil fuels to the use of clean energy systems.

Environmentally Sustainable Agriculture

An agriculture and food sector that demonstrates validated performance around producing food with a low environmental footprint.

Water Services

Drinking water and wastewater infrastructure must meet the needs of our society.

Circular Economy

Move to a less wasteful and circular economy where the priority is waste prevention, reuse, repair and recycling.

Land Use

Promote integrated land-mapping approaches to support decision-making on sustainable land use.

The report highlights that high-quality green and blue spaces are not just for nature but are for peoples' health and wellbeing, particularly in the context of an increasingly urban society and increasing settlement densities.

4.3 Sustainable Development Goals

Implementation of the Plan will contribute towards efforts to achieve a number of the 17 Sustainable Development Goals of the 2030 Agenda for Sustainable Development, which were adopted by world leaders in 2015 at a

be required taking into account, inter alia, the extent to which certain matters are more appropriately assessed at different levels in that process in order to avoid duplication of the assessment.

United Nations Summit and came into force in 2016. These Goals include:

- Goal 3. Ensure healthy lives and promote wellbeing for all at all ages.
- Goal 6. Ensure availability and sustainable management of water and sanitation for all.
- Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all.
- Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
- Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
- Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable.
- Goal 12. Ensure sustainable consumption and production patterns.
- Goal 13. Take urgent action to combat climate change and its impacts.
- Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

4.4 Likely Evolution of the Environment in the Absence of a new Plan

In the absence of a new Local Area Plan, the framework for development across the Plan area would be provided by the County Development Plan and other related documents. There would be no Local Area Plan to provide additional detail beyond that provided already through the existing planning framework as how to achieve sustainable development and environmental protection and management in the town.

As a result, there would be a decreased likelihood in the extent, magnitude and frequency of the positive environmental effects identified by this assessment occurring, including:

- Contribution towards protection of ecology (including designated sites, ecological connectivity, habitats) by facilitating development of lands (including those within and adjacent to the County's existing built-up footprint) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the County and beyond.
- Contribution towards the maintenance of existing green infrastructure and associated ecosystem services, listed species, ecological connectivity and non-designated habitats.

- Contribution towards protection and/or maintenance of biodiversity and flora and fauna by contributing towards the protection of natural capital including the environmental vectors of air, water and soil. Biodiversity and flora and fauna includes biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species (including birds and bats), listed/protected species, ecological connectivity and non-designated habitats (including terrestrial and aquatic habitats), and disturbance to biodiversity and flora and fauna including terrestrial and aquatic biodiversity and flora and fauna.
- Sustains existing sustainable rural management practices - and the communities who support them - to ensure the continuation of longestablished managed landscapes and the flora and fauna that they contain.
- Promotion of economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management.
- Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands (including those within and adjacent to the County's existing built-up footprint) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere in the County and beyond
- Contribution towards the protection of human health by facilitating development of lands (including those within and adjacent to the County's existing built-up footprint) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the County and beyond.
- Contributes towards protection of human health as a result of contributing towards the protection of natural capital including environmental vectors, including air and water.
- Contribution towards the protection of soils by facilitating development of lands (including those within and adjacent to the County's existing builtup footprint) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the County and beyond.
- Contribution towards the protection of water by facilitating development of lands (including those within and adjacent to the County's existing builtup footprint) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the County and beyond.
- Contributions towards the protection of water resources including the status of surface and groundwaters and water-based designations.
- Contribution towards flood risk management and appropriate drainage.
- Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact

development of lands (including those within and adjacent to the County's existing built-up footprint) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere in the County and beyond.

- Contribution towards compliance with national and regional water services and waste management policies.
- Contribution towards increase in renewable energy use by facilitating renewable energy and electricity transmission infrastructure developments.
- Contribution towards limits in increases in energy demand from the transport sector by facilitating sustainable compact growth.
- Contribution towards reductions in average energy consumption per capita including promoting energy efficient buildings, retrofitting, smart buildings, cities and grids.
- Contribution towards climate mitigation and adaptation by facilitating compact development of lands (including those within and adjacent to the County's existing built-up footprint) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere in the County and beyond.
- In combination with other plans, programmes etc., contribution towards the objectives of the wide policy framework relating to climate mitigation and adaptation, and associated contribution towards maintaining and improving air quality and managing noise levels, including through measures relating to:
 - Sustainable compact growth;
 - Sustainable mobility, including walking, cycling and public transport;
 - Drainage, flood risk management and resilience;
 - Sectors including agriculture, residential heating and infrastructure;
 - Sustainable infrastructure design solutions including energy efficient buildings and green infrastructure.
- Contributes towards protection of cultural heritage elsewhere in the County by facilitating development within and adjacent to the Plan area's existing built-up footprint.
- Contributes towards protection of cultural heritage within and adjacent to the Plan area's existing built-up footprint by facilitating brownfield development and regeneration.
- Contributes towards protection of wider landscape and landscape designations by facilitating development within and adjacent to the Plan area's existing built-up footprint.

Furthermore, there would be an increased likelihood in the extent, magnitude and frequency of the adverse environmental effects identified by this assessment occurring, including:

- 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 such as birds and bats.
- Potential adverse effects arising from flood events.
- Potential interactions if effects arising from environmental vectors.
- Potential adverse effects on the hydrogeological and ecological function of the soil resource
- Potential for riverbank erosion.
- Potential adverse effects upon the status of water bodies and entries to the WFD Register of Protected Areas (ecological and human value), arising from changes in quality, flow and/or morphology.
- Increase in flood risk and associated effects associated with flood events.
- Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity ensures the mitigation of potential conflicts).
- Failure to adequately treat surface water run-off that is discharged to water bodies (water services infrastructure and capacity ensures the mitigation of potential conflicts).
- Failure to comply with drinking water regulations and serve new development with adequate drinking water (water services infrastructure and capacity ensures the mitigation of potential conflicts).
- Increases in waste levels.
- Potential impacts upon public assets and infrastructure.
- Potential conflict between development under the Plan and aiming to reduce carbon emissions in line with local, national and European environmental objectives.
- Potential conflicts between transport emissions, including those from cars, and air quality.
- Potential conflicts between increased frequency of noise emissions and protection of sensitive receptors.
- Potential conflicts with climate adaptation measures including those relating to flood risk management.
- Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities.
- Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape.

4.5 Natural Capital and Ecosystem Services

Natural capital comprises renewable and nonrenewable resources (e.g. plants, animals, air, water, soils, minerals) that combine to yield a flow of ecosystem services that provide benefits to people. These benefits can include clean air and water, a stable climate, protection from floods, food, resources for fuel, building materials, clothes and medicines, recreation. Managing natural capital so that it can continue to deliver the ecosystem services that provide these benefits is important in order to ensure sustainable development. Unmanaged natural capital risks the continued degradation and depletion of these assets, and in turn, of their capacity to provide the economy and society with the ecosystem benefits that they depend on. These services also regulate climate, regulate water flows (e.g. through wetlands and forests), sequester and store carbon in peatlands and improve soil quality for crops.

In recognition of the need to manage natural capital, provisions have been integrated into the Local Area Plan and the associated highertier Dún Laoghaire-Rathdown County Development Plan 2022-2028 that will contribute towards management of air quality, noise pollution, light pollution, water quality and integrated catchment management.

Ecosystems are multifunctional communities of living organisms interacting with each other and their environment. Ecosystems provide a series of services for human well-being (ecosystem services) either directly or indirectly contributing towards human wellbeing. There are four main types; provisioning, regulating, supporting and cultural services. Provisioning services are the products obtained from ecosystems such as food, fresh water, wood, fibre, genetic resources and medicines. Regulating services are defined as the benefits obtained from the regulation of ecosystem processes such as climate regulation, natural hazard regulation, water purification and waste management, pollination or pest control. Support services highlight the importance of ecosystems to provide habitat for migratory species and to maintain the viability of genepools. Cultural services include non-material benefits that people obtain from ecosystems such as spiritual enrichment, intellectual development, recreation and aesthetic values⁷.

In preparing the Plan and developing policy objectives, the Council have followed these ecosystem services approach principles (including through the strategic aims and various policy objectives):

- Consideration of natural systems by using knowledge of interactions in nature and how ecosystems function.
- Taking into account of the services that ecosystems provide - including those that underpin social and economic well-being, such as

- flood and climate regulation, resources for food, fibre or fuel, or for recreation, culture and quality of life.
- c) Involving people those who benefit from the ecosystem services and those managing them need to be involved in decisions that affect them.

The following natural capital and ecosystem services issues are relevant to this SEA and have been taken into account in the provisions of the Local Area Plan and the associated higher-tier Dún Laoghaire-Rathdown County Development Plan 2022-2028:

- Pollination;
- Air quality;
- Noise pollution;
- Light pollution;
- Water quality and integrated catchment management including interactions with soil;
- Soil and vegetation carbon, which helps to regulate greenhouse gas emissions;
- Soil/geological storage of water, contributing towards flood control;
- Land supporting food production; and
- Natural resources supporting energy production and recreation.

4.6 Biodiversity and Flora and Fauna

4.6.1 Overview

Information on biodiversity and flora and fauna which is relevant to project planning and development and associated environmental assessment and administrative consent of projects includes available information on designated ecological sites and protected species, ecological connectivity (including stepping stones and corridors) and non-designated habitats.

Key ecological sensitivities within and surrounding the Plan area include:

- Ecologically designated sites less than 5 km from the Plan area, including: FitzSimon's Wood proposed Natural Heritage Area, c. 2 km to the south of the Plan area; South Dublin Bay and River Tolka Estuary Special Protection Area, c. 2.8 km to the north-east of the Plan area; and South Dublin Bay Special Area of Conservation, c. 2.8 km to the north-east of the plan area;
- Locally important habitats, including various woodlands, parks, gardens, hedgerows and lands used for agriculture within and surrounding the Plan area, providing habitats for flora and fauna and facilitating linkages and corridors to the surrounding countryside for the wildlife; and

⁷ https://biodiversity.europa.eu/topics/ecosystem-services

 Aquatic and riverine ecology associated with the streams and rivers draining the Plan area, including the River Dundrum Slang, which flows into the River Dodder at Milltown, and associated riparian buffer zones. The Dodder and several of its tributaries are exceptional in supporting Atlantic salmon and sea trout in addition to resident brown trout populations, eels and other fish species. Stretches of the Dodder support protected species including otter and bats.

The following information is relevant to ecological networks and connectivity and non-designated habitats:

- Watercourses, wetlands and peatlands;
- Other relevant County Development Plans designations;
- The EPA's Framework National Ecological Network for Ireland⁸;
- Pollinator Areas⁹; and
- Other sites of high biodiversity value or ecological importance as identified by, for example, the Department of Agriculture, Food and the Marine (badger sets), relevant datasets from the National Biodiversity Data Centre and BirdWatch Ireland's 'Important Bird Areas' (Crowe et al., 2009).

The zone of influence of the Plan beyond the Plan area with respect to impacts upon ecology

via surface waters – including designated ecology – can be estimated to be areas within 15 km of the Plan area and all downstream areas of catchments which drain the area.

4.6.2 European Sites

European sites comprise Special Areas of Conservation¹⁰ (SACs) and Special Protection Areas¹¹ (SPAs). Such sites within 15 km buffer around the Plan area are mapped on Figure 4.1). There are no SACs or SPAs designated within the Plan area, however, there are a total of 17 European sites (ten SACs and seven SPAs) within 15 km of the Plan boundary (as listed below and shown on Figure 4.1):

- South Dublin Bay and River Tolka Estuary SPA (Site Code: 004024)¹²;
- South Dublin Bay SAC (Site Code 000210)¹³;
- Wicklow Mountains SAC (Site Code: 002122)¹⁴;
- Wicklow Mountains SPA (Site Code: 004040)¹⁵;
- North Bull Island SPA (Site Code: 004006)¹⁶;
- North Dublin Bay SAC (Site Code: 000206)¹⁷;
- Knocksink Wood SAC (Site Code: 000725)¹⁸;
- Glenasmole Valley SAC (Site Code: 001209)¹⁹;
 Dalkey Islands SPA (Site Code: 004172)²⁰;
- ⁸ The EPA's Framework National Ecological Network provides a classification of the relative importance of areas by virtue of the biodiversity and flora that they contain and the connectivity they provide. Many of the areas identified
- ⁹ There are currently approx. 100 of these sites designated across the County, however there are none within the Plan area (as per datasets included in Dún Laoghaire-Rathdown County Development Plan 2022-2028).
- ¹⁰ SACs have been selected for protection under the European Council Directive on the conservation of natural habitats and of wild fauna and flora (92/43/EEC) due to their conservation value for habitats and species of importance in the European Union. The Habitats Directive seeks to establish Natura 2000, a network of protected areas throughout the EU. It is the responsibility of each member state to designate SACs to protect habitats and species, which, together with the SPAs designated under the 1979 Birds Directive, form Natura 2000. The European Communities (Birds and Natural Habitats) Regulations 2011 consolidate the European Communities (Natural Habitats) Regulations 1997 to 2005 and the European Communities (Birds and Natural Habitats) (Control of Recreational Activities) Regulations 2010. The Regulations have been prepared to address several judgments of the Court of Justice of the European Union (CJEU) against Ireland, notably cases C-418/04 and C-183/05, in respect of failure to transpose elements of the Birds Directive and the Habitats Directive into Irish law.
- ¹¹ SPAs have been selected for protection under the 1979 European Council Directive on the Conservation of Wild Birds (79/409/EEC) referred to as the Birds Directive due to their conservation value for birds of importance in the EU.
- Sensitive features comprise: grey plover; knot oystercatcher; ringed plover; roseate tern; dunlin; blackheaded gull; wetland and waterbirds; redshank; light-

bellied brent goose; bar-tailed godwit common tern; sanderling; and arctic tern.

- ¹³ Sensitive features comprise: salicornia and other annuals colonising mud and sand; mudflats and sandflats not covered by seawater at low tide; annual vegetation of drift lines; and embryonic shifting dunes.
- ¹⁴ Sensitive features comprise: otter; Alpine and Boreal heaths; Northern Atlantic wet heaths; siliceous rocky slopes with chasmophytic vegetation; oligotrophic waters containing very few minerals of sandy plains; species-rich nardus grasslands, on siliceous substrates in mountain areas and submountain areas in continental Europe; European dry heaths; calcareous rocky slopes with chasmophytic vegetation; siliceous scree of the montane to snow levels; natural dystrophic lakes and ponds; calaminarian grasslands; blanket bogs; and old sessile oak woods with Ilex and Blechnum in the British.
- ¹⁵ Sensitive features comprise: merlin and peregrine falcon. ¹⁶ Sensitive features comprise: dunlin; black-tailed godwit; bar-tailed godwit; shelduck; pintail; curlew; sanderling; oystercatcher; wetland and waterbirds; black-headed gull; golden plover; turnstone; knot light-bellied brent goose; teal; redshank; and shoveler grey plover.
- ¹⁷ Sensitive features comprise: salicornia and other annuals colonising mud and sand; embryonic shifting dunes; Atlantic salt meadows; annual vegetation of drift lines; fixed coastal dunes with herbaceous vegetation grey dunes; petalwort Mediterranean salt meadows; humid dune slacks; and shifting dunes along the shoreline; mudflats and sandflats not covered by seawater at low tide.
- Sensitive features comprise: old sessile oak woods; alluvial forests; and petrifying springs with tufa formation.
 Sensitive features comprise: petrifying springs with tufa formation; semi-natural dry grasslands and scrubland facies on calcareous substrates; and molinia meadows on calcareous, peaty or clayey-silt-laden soils.
- ²⁰ Sensitive features comprise: common tern; roseate tern; and Arctic tern.

- Rockabill to Dalkey Island SAC (Site Code: 003000)²¹;
- Ballyman Glen SAC (Site Code: 000713)²²;
 Howth Head SAC (Site Code: 000202)²³;
- Balydoyle Bay SAC (Site Code: 000199)²⁴;
- Balydoyle Bay SPA (Site Code: 004016)²⁵;
- Bray Head SAC (Site Code: 000714)²⁶;
- Howth Head Coast SPA (Site Code: 004113)²⁷;
- North-west Irish Sea SPA²⁸.

There are no other hydrologically connected European sites within the wider region beyond 15 km buffer zone (i.e. downstream of the Plan boundary).²⁹

For more detail on European sites please refer to the AA document that accompanies the Plan and this SEA Environmental Report.

4.6.3 Natural Heritage Areas and Proposed Natural Heritage Areas

Natural Heritage Areas (NHAs) are designated due to their national conservation value for ecological and/or geological/geomorphological heritage. They cover nationally important seminatural and natural habitats, landforms or geomorphological features, wildlife plant and animal species or a diversity of these natural attributes. NHAs are designated under the Wildlife (Amendment) Act 2000. Proposed NHAs (pNHAs) were published on a non-statutory basis in 1995, but have not since been statutorily proposed or designated.

There are no pNHAs or NHAs designated within the Plan boundary. There are no NHAs designated within and within a 15 km buffer of the Plan area, however there are 33 pNHAs in total designated within and within a 15 km buffer of the Plan area, as mapped on Figure 4.2 and listed on Table 4.1.

Table 4.1 pNHAs within and within 15 km of the Plan area

pNHAs			
Designation	Site Code	Site Name	
pNHA	000205	Malahide Estuary	
	001208	Feltrim Hill	
	000178	Santry Demesne	
	001763	Sluice River Marsh	
	000199	Baldoyle Bay	
	000203	Ireland's Eye	
	000202	Howth Head	
	000206	North Dublin Bay	
	002103	Royal Canal	
	001398	Rye Water Valley/Carton	
	000128	Liffey Valley	
	002104	Grand Canal	
	000210	South Dublin Bay	
	001206	Dalkey Coastal Zone and Killiney Hill	
	001753	Fitzsimon's Wood	
	000991	Dodder Valley	
	001212	Lugmore Glen	
	000211	Slade of Saggart and Crooksling Glen	
	001394	Kilteel Wood	
	001211	Loughlinstown Woods	
	001207	Dingle Glen	
	001202	Ballybetagh Bog	
	000725	Knocksink Wood	
	000713	Ballyman Glen	
	000714	Bray Head	
	001754	Dargle River Valley	
	001768	Powerscourt Woodland	
	001755	Glencree Valley	
	001767	Powerscourt Waterfall	
	001769	Great Sugar Loaf	

 $^{^{\}rm 21}$ Sensitive features comprise: harbour porpoise and reefs.

²² Sensitive features comprise: petrifying springs with tufa formation and alkaline fens.

²³ Sensitive features comprise: European dry heaths and vegetated sea cliffs of the Atlantic and Baltic coasts.

²⁴ Sensitive features comprise: salicornia and other annuals colonising mud and sand; Atlantic salt meadows; Mediterranean salt meadows; and mudflats and sandflats not covered by seawater at low tide.

²⁵ Sensitive features comprise: ringed plover; shelduck; wetland and waterbirds; grey plover; light-bellied brent goose; bar-tailed godwit; and golden plover.

goose; bar-tailed godwit; and golden plover.

²⁶ Sensitive features comprise: European dry heaths; and vegetated sea cliffs of the Atlantic and Baltic coasts.

²⁷ Sensitive features comprise: kittiwake.

²⁸ The designation of this SPA emerged following display of the Draft Plan and Conservation Objectives were shared by the National Parks and Wildlife Service in September 2023. Sensitive features comprise: Fulmar, Little Tern, Redthroated Diver, Cormorant, Shag, Black-headed Gull, Great Northern Diver, Manx Shearwater, Kittiwake, Great Blackbacked Gull, Common Scoter, Little Gull, Puffin, Razorbill, Roseate Tern, Common Tern, Common Gull, Guillemot, Herring Gull, Arctic Tern and Lesser Black-backed Gull.

²⁹ However, there are three additional European sites with groundwater sensitive Qualifying Interests and within the same groundwater bodies as the Plan area, but beyond 15 km buffer zone: Malahide Estuary SAC (Site Code: 000205); Rye Water Valley/Carton SAC (Site Code: 001398); and Ballynafagh Lake SAC (Site Code: 001387). For more detail refer to AA NIR report.

pNHAs		
	000724	Kilmacanoge Marsh
	000719	Glen of the Downs
	000731	Poulaphouca Reservoir

4.6.4 Land Cover

Land cover is the observed physical cover, as seen from the ground or through remote sensing, including for example natural or planted vegetation, water and human constructions which cover the earth's surface.

The CORINE 2018³⁰ mapping (as shown on Figure 4.3) identifies the land cover within and surrounding central parts of the Plan area as urban fabric.

There are no areas likely, considering the CORINE data, to contain Annex I Habitats occurring within the Plan area.

4.6.5 Register of Protected Areas

In response to the requirements of the Water Framework Directive (WFD) a number of water bodies or parts of water bodies that must have extra controls on their quality by virtue of how their waters are used by people and by wildlife have been listed on Registers of Protected Areas (RPAs). Entries to the RPAs within and adjacent to the Plan area, designated by virtue of their value to biodiversity include a number of water-dependent habitats within the area that have been listed on RPAs relating to biodiversity – these relate to designated SACs and SPAs (see Section 4.6.2) and associated surface and groundwaters.

RPAs designated by virtue of their value to humans are addressed under Section 4.9.7.

4.6.6 Other Local Sites of High Biodiversity Value or Ecological Importance³¹

Ecological networks are important in connecting areas of local biodiversity with each other and with nearby designated sites so as to prevent

islands of habitat from being isolated entities. They are composed of linear features, such as tree lines, hedgerows and rivers/streams, which provide corridors or stepping stones for wildlife species moving within their normal range. They are important for the migration, dispersal and genetic exchange of species of flora and fauna particularly for mammals, especially for bats and small birds and facilitate linkages both between and within designated ecological sites, the non-designated surrounding countryside and urban areas. Wildlife corridors within and surrounding the Plan area are shown on Figure 4.5.

Article 10 of the Habitats Directive recognises the importance of ecological networks as corridors and stepping stones for wildlife, including for migration, dispersal and genetic exchange of species of flora and fauna. The Directive requires that ecological connectivity and areas of ecological value outside the Natura 2000 network of designated ecological sites are maintained.

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

Ecological islands or areas of habitat that are not connected to surrounding ecologically valuable habitats can also be important. Biodiversity of the Plan area encompasses the various parklands, individual gardens, communal open spaces, waterways (including the River Slang), greens strips and wildlife areas, which adjoin the Luas line, roads and streets, lands at St. Nahi's cemetery and the various species - both plant and animal - that occupy and/or pass through these areas.

A variety of woodlands and individual trees throughout the Plan area are designated for

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³⁰ The CORINE (Co-ordinated Information on the Environment) land cover data series was devised as a

means of compiling geo-spatial environmental information in a standardised and comparable manner.

³¹ Dundrum Local Area Plan 2023

preservation and protection under the Dún Laoghaire-Rathdown County Development Plan 2022-2028. Within the Plan area, substantial groups of trees to be protected or preserved are predominantly identified at the following locations (as shown on Figure 4.4):

- In and around Airfield Estate;
- Along the Slang River Greenway;
- To the east of Ballinteer Road (around the Lynwood and Castlebrook housing estates);
- Along Sandyford Road (in the vicinity of the Herbert Hill, Ridgeford and Ashgrove developments) and
- On the Central Mental Hospital lands.

The extension and enhancement of suitable woodland areas and tree lines within the Plan area has the potential to significantly improve biodiversity within Dundrum and strengthen the ecological corridors within these lands.

The Plan area includes part of a wider county-wide ecological network, including an ecological corridor ('Ticknock to the River Dodder') that passes through the Plan area, incorporating areas of green infrastructure along the River Slang, within Airfield Estate, adjacent to the west of the Dundrum Bypass and along Dundrum Road. Although culverted in places, the Slang River is an important green/blue infrastructure corridor and habitat in the Dundrum area, providing multi-functional ecosystem services such as land drainage, recreational amenity, clean/cool air and a wildlife corridor.

The Plan sets out overarching objectives and more specific actions, the implementation of which will help to ensure the protection and restoration of the identified corridors. The wildlife corridor does not preclude development of the lands subject to assessment under the planning process and subject to any other legal obligations.

4.6.7 Existing Problems

Ireland's Article 17 report on the Status of EU Protected Habitats and Species in Ireland (DCHG, 2019) identifies various Irish, EU-protected habitats and species to be of unfavourable status and many to be still declining, although it also identifies that a range of positive actions are underway. Categories for pressures and threats on Ireland's habitats and species identified by the report comprise:

- Agriculture;
- Forestry;

- Extraction of resources (minerals, peat, nonrenewable energy resources);
- Energy production processes and related infrastructure development;
- Development and operation of transport systems:
- Development, construction and use of residential, commercial, industrial and recreational infrastructure and areas;
- Extraction and cultivation of biological living resources (other than agriculture and forestry);
- Military action, public safety measures, and other human intrusions:
- Alien and problematic species;
- Mixed source pollution;
- Human-induced changes in water regimes;
- Natural processes (excluding catastrophes and processes induced by human activity or climate change);
- Geological events, natural catastrophes;
- Climate change; and
- Unknown pressures, no pressures and pressures from outside the Member State.

Previous changes in land uses arising from human development have resulted in a loss of biodiversity and flora and fauna; however, legislative objectives governing biodiversity and fauna were not identified as being conflicted with. The Plan includes measures to contribute towards the protection of biodiversity and flora and fauna and associated ecosystem services.

Invasive non-native species are present within the Plan area, along the Slang River corridor, include Japanese knotweed and winter heliotrope. All applications for development within or near the river corridor will need to demonstrate compliance with the Dún Laoghaire-Rathdown County Development Plan 2022-2028 measures relating to invasive non-native species.

Biodiversity in the area also faces a number of challenges including fragmentation of habitats (the River Slang is part-culverted, which can fragment habitats). Proposals for development, including those that interact with or cross the Slang River, such as blueways and greenways, will be subject to AA under the Habitats Directive.

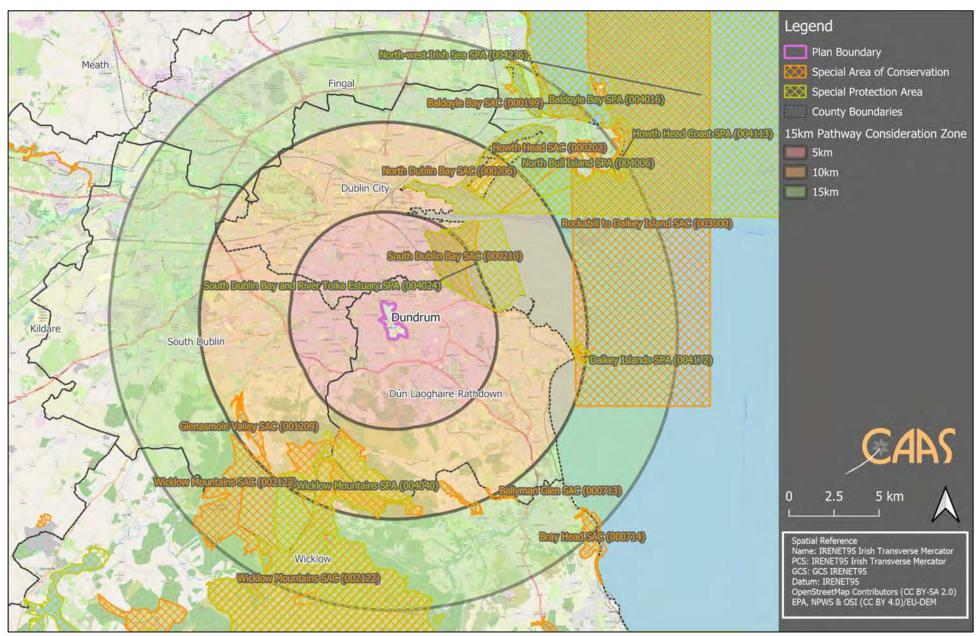


Figure 4.1 European sites within and within a 15 km buffer of the Plan area

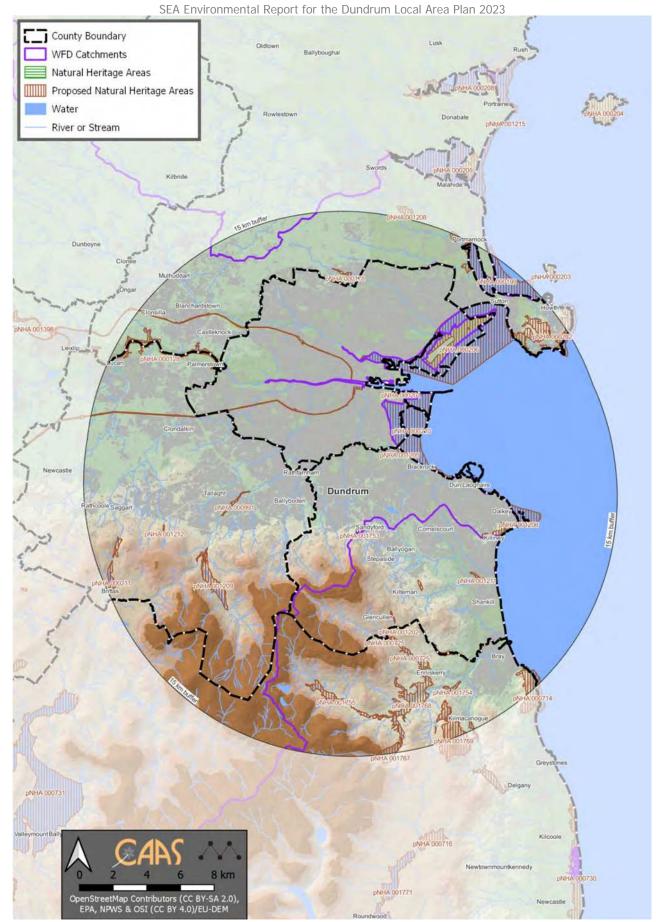


Figure 4.2 NHAs and pNHAs within and within a 15 km buffer of the Plan area

County Boundary 121 - Industrial or commercial units Land Cover 2018 141 - Green urban areas 112 - Discontinuous urban fabric 142 - Sport and leisure facilities Figure 4.3 CORINE Land Cover Mapping 2018 CAAS for Dún Laoghaire-Rathdown County Council 19

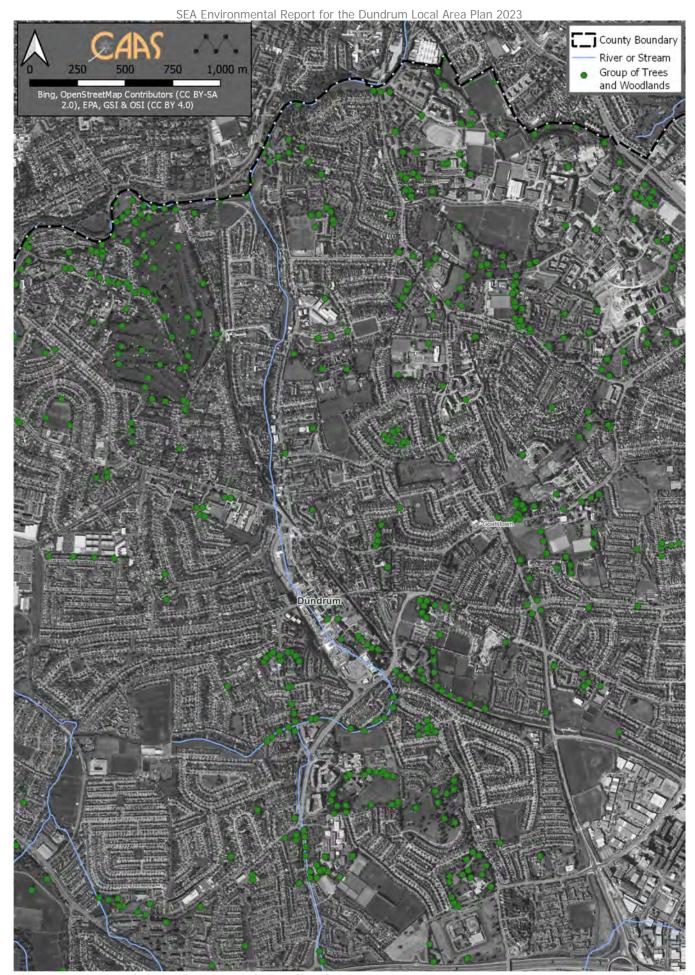


Figure 4.4 Trees, Group of Trees and Woodlands

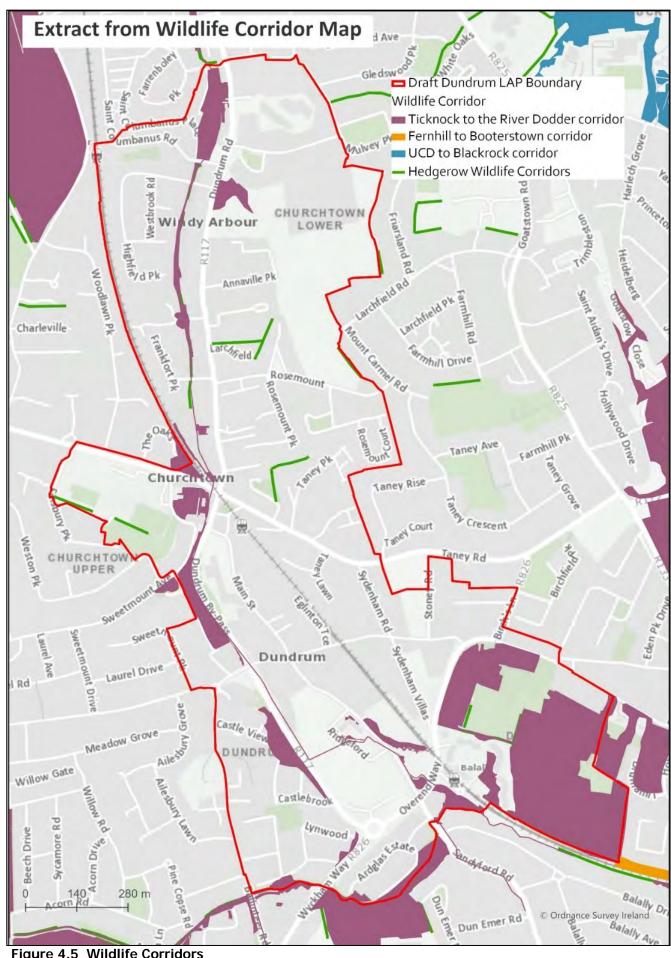


Figure 4.5 Wildlife Corridors (Source: Dundrum Local Area Plan 2023)

4.7 Population and Human Health

4.7.1 Population

Census 2016 recorded a population of 5,323 persons in Dundrum. The population projections for the Plan area allocate a potential population increase of approx. 6,500 persons.³²

Dundrum is identified as a Major Town Centre in the Dún Laoghaire-Rathdown County Development Plan 2022-2028. Major Town Centres provide a full range of all types of retail services from newsagents to specialist shops and boutiques, department stores, food stores of all types and a high level of mixed uses including the arts and culture to create vibrant, living places.

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

- Recreational and development pressure on habitats and landscapes;
- Contribution towards increase in demand for waste water treatment at the municipal level;
- Contribution towards increase in demand for water supply and associated potential impact of water abstraction;
- Potential interactions in flood-sensitive areas; and
- Potential effects on water quality.

4.7.2 Human Health

With regard to human health, impacts relevant to the SEA are those which arise as a result of interactions with environmental vectors (i.e. environmental components such as air, water or soil through which contaminants or pollutants, which have the potential to cause harm, can be transported so that they come into contact with human beings). Hazards or nuisances to human health can arise as a result of exposure to these vectors e.g. interactions with human health that could occur in urban locations that experience high levels of traffic congestion and associated particulate matter and noise emissions to air.

These factors have been considered with regard to the description of: the baseline of each environmental component; and the identification and evaluation of the likely significant environmental effects of implementing the Plan.

4.7.3 Existing Problems

The number of homes within the Plan area with radon levels above the reference level is within the normal range experienced in other locations across the country³³.

Parts of the Plan area are vulnerable to adverse effects from changes in the occurrence of severe rainfall events and associated flooding from surface water. Flooding in certain circumstances could pose a risk to human health. There is historic and predictive evidence of flooding within the Plan area (4.9.8).

Also refer to the other sections of this report referred to above with respect interactions with other environmental components.

4.8 Soil

Soil is the top layer of the earth's crust. It is formed by mineral particles, organic matter, water, air and living organisms. Soil can be considered as a non-renewable natural resource because it develops over very long timescales. It is an extremely complex, variable and living medium and performs many vital functions including: food and other biomass production, storage, filtration and

received by the Irish population. As a known carcinogen, in the same category as tobacco smoke and asbestos it is a cause of lung cancer. Exposure to radon for long periods or at high concentrations can lead to lung cancer. Mapping available at http://www.epa.ie/radiation/radonmap

Emission limits for discharges to air, soil and water are set with regards to internationally recognised exposure limit values. These are generally set to be many times the safe exposure limit - in order to provide protection. In the event that a plan or programme began to have adverse health effects on surrounding populations it is likely that it would have been identified as being in breach of such emission standards at a very early stage - and long before the manifestation of any adverse health effects in the population.

³² Dundrum Local Area Plan 2023

³³ The greatest health risk from radiation in Ireland is caused by radon. The presence of radon gas, a naturally occurring radioactive gas that originates from the decay of uranium in rocks and soils, occurs across the country. It accounts for more than half of the total radiation dose

transformation of many substances including water, carbon, and nitrogen. Soil has a role as a habitat and gene pool, serves as a platform for human activities, landscape and heritage and acts as a provider of raw materials. Such functions of soil are worthy of protection because of their socio-economic as well as environmental importance. Soils in any area are the result of the interaction of various factors, such as parent material, climate, vegetation and human action.

To date, there is no legislation which is specific to the protection of soil resources. However, the EU Soil Strategy for 2030 sets out a framework and concrete measures to protect and restore soils, and ensure that they are used sustainably. It sets a vision and objectives to achieve healthy soils by 2050, with concrete actions by 2030. It also announces a new Soil Health Law by 2023 to ensure a high level of environmental and health protection.

4.8.1 Soil Types

The built-up areas within and surrounding Dundrum are mainly made up of urban soils³⁴ (as shown on Figure 4.6). Urban soils are soils, which have been disturbed, transported or manipulated by human activity in the urban environment and are often overlain by a non-agricultural, man-made surface layer that has been produced by mixing, filling or by contamination of land surfaces in urban and suburban areas.

4.8.2 County Geological Sites

Geological Survey Ireland coordinate the Irish Geological Heritage Programme, whereby an objective has been set to identify and select sites of geological interest within each county across the country. County Geological Sites (CGSs) do not receive statutory protection like Natural Heritage Areas but receive an effective protection from their inclusion in the planning system. The audit of CGSs in Dún Laoghaire-Rathdown was completed in 2014, which identified 12 CGSs. There are no designated County Geological Sites occurring within the Plan area. The closest CGS located c.3 km to

the south of the Plan area is the Murphystone Quarry.

4.8.3 Landslides

The term "landslide" describes a wide variety of processes that result in the downward and outward movement of materials such as rock, debris, earth, mud and peat under the force of gravity. Issues such as existing ground conditions, slope stability and storage of excavated material have the potential to influence susceptibility to landslides/bog bursts. The potential impacts of landslides include loss of human life/injury, flooding, pollution of watercourses and impacts upon aquatic biodiversity.

There are no landslide events recorded within the Plan area. The GSI have identified³⁵ the Plan area as having mainly low levels of landslide susceptibility (mapped on Figure 4.7).

4.8.4 Potentially Contaminated Lands and Landfill Sites

In the absence of mitigation, contaminated materials have the potential to adversely impact upon human health, water quality and habitats and species. As is the case with other urban and semi-urban areas across the country, there is potential for contamination at sites within the Plan area, especially where land uses occurred in the past, in the absence of environmental protection legislation.

4.8.5 Existing Problems

Legislative objectives governing soil were not identified as being conflicted with.

³⁴ All soil types belong to a Sub-Group and so in turn to one of the 11 soil Great Groups. Great Groups and Sub-Groups are a hierarchical arrangement of soils used for taxonomical classification

⁽http://gis.teagasc.ie/soils/soilguide.php).

³⁵ https://www.gsi.ie/en-ie/programmes-andprojects/geohazards/projects/Pages/Landslide-Susceptibility-Mapping.aspx



Figure 4.6 Soil types

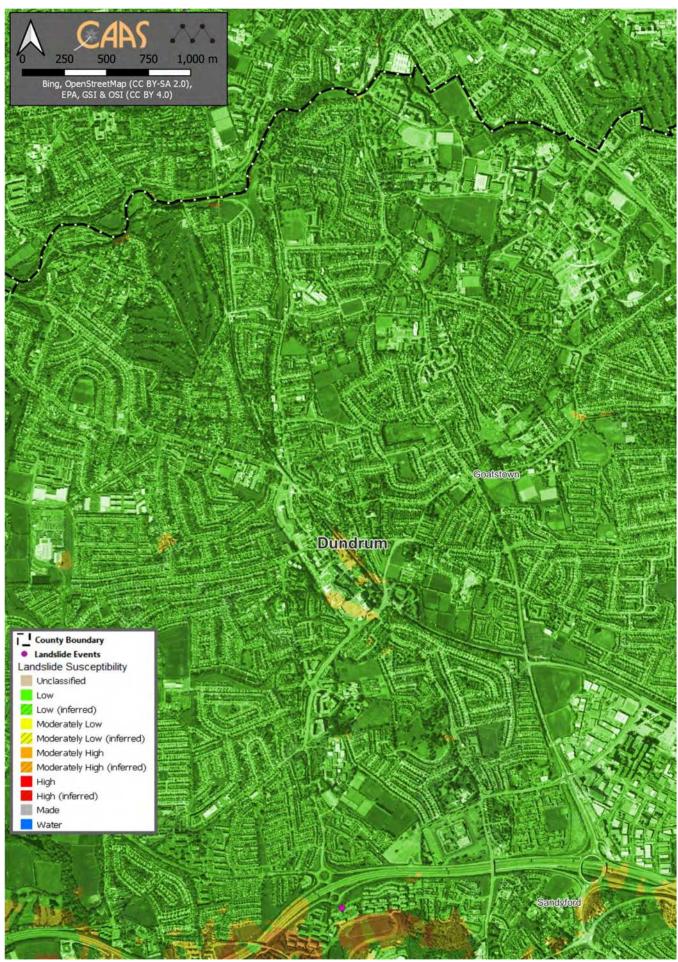


Figure 4.7 Landslide susceptibility

4.9 Water

4.9.1 The Water Framework Directive

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

Article 4 of the WFD sets out various exemptions for deterioration in status caused as a result of certain physical modifications to water bodies. This is provided: all practicable mitigation measures are taken; there are reasons of overriding public interest or the benefits to human health, safety or sustainable development outweigh the benefits in achieving the WFD objective; there are no better alternatives; and the reasons for the physical modification are explained in the River Basin Management Plan (RBMP).

The EU's Common Implementation Strategy Guidance Documents No. 20 and 36 provide guidance on exemptions to the environmental objectives of the WFD.

For the purpose of assessment, reporting and management, water is divided into groundwater, rivers, lakes, estuarine waters and coastal waters which are in turn divided into specific, clearly defined water bodies.

4.9.2 Zone of Influence

The Zone of Influence of the Plan beyond the Plan area with respect to impacts upon waters can be estimated to be all groundwater and surface water bodies that are downstream of catchments which drain the Plan area.

4.9.3 Surface Water Drainage

A catchment is an area of land contributing to a waterbody, with all the water ultimately running off to a single outlet. The WFD requires water quality management to be based on natural river catchments i.e. by reference to the natural, environmental unit rather than by reference to administrative or legal boundaries, which often fragment river catchments.

Surface water within the Plan area drains toward the Dundrum Slang and its tributaries. The river originates at Three Rock Mountain and flows through Ticknock and Ballinteer. The main tributary of the Slang within the Plan area flows from the south. The River loops around through the Ardglass Estate and continues northward until it meets the River Dodder at Milltown.

4.9.4 Surface Water Status

The WFD defines 'overall surface water status' as the general expression of the status of a body of surface water, determined by the poorer of its ecological status and its chemical status. Thus, in order to achieve 'good surface water status' both the ecological status and the chemical status of a surface water body need to be at least 'good'.

The ecological status is an expression of the structure and functioning of aquatic ecosystems associated with surface waters. Such waters are classified as of 'good ecological status' when they meet Directive requirements.

Chemical Status is a pass/fail assignment with a failure defined by a face-value exceedance of an Environmental Quality Standards (EQS) for one or more Priority Action Substances (PAS) listed in Annex X of the Water Framework Directive (WFD). The EQS values for individual PAS substances are set at European level. Good surface water chemical status means that concentrations of pollutants in the water body do not exceed the environmental limit values specified in the Directive.

The current WFD (2016-2021) status³⁶ of the River Slang draining the Plan area is *moderate* (identified by the EPA as: 'Dodder_50'). Figure 4.8 illustrates the WFD surface water status

³⁶ As per EPA's WFD Status 2016-2021 classification (https://gis.epa.ie/EPAMaps/).

within and surrounding the Plan area. The River Slang is currently identified in the combined 2016-2021 data as being at risk of not meeting the WFD's objectives due to the damage being caused by significant pressures related to³⁷:

- Urban wastewater pressures, which may include direct discharge of nutrients from urban wastewater treatment plants and discharge from combined storm overflows or storm water overflows. Discharges of elevated concentrations of phosphorus, ammonium and nitrogen can impact on the ecology of surface waters.
- Urban run-off pressures, which may include leaking sewers and run-off from paved and unpaved areas and misconnections where private foul connections are connected to storm sewers instead of the foul sewer network.
- Anthropogenic and hydromorphological pressures, which are identified together in many instances. Hydromorphological pressures may include: modifications to the physical habitat conditions or the natural functioning of a waterbody which can impact on ecology, caused by dredging and straightening of rivers (channelisation), land drainage or hard infrastructure such as dams, weirs, culverts or other obstructions. Anthropogenic pressures may include: water abstractions; invasive species; agriculture; use of fertilizers, manures and animal husbandry pesticides; activities: inefficient irrigation practices; deforestation of woods; aquaculture; pollution due to industrial effluents and domestic sewage; and recreational activities.

Any development within the Plan area shall comply with the policies and objectives of the County Development Plan relating to protection of existing water and drainage infrastructure. One of the key themes of Appendix 14 "Green Infrastructure Strategy" of the Dún Laoghaire-Rathdown County Development Plan 2022-2028 is "Water Management", which is based on the role and potential of Green Infrastructure to better manage surface and flood water and to contribute to maintaining and improving the quality of water in the County.³⁸

4.9.5 Groundwater Status

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

pressure is atmospheric, in which all pores and fissures are full of water.

For groundwater bodies, the approach to classification is different from that for surface water. For each body of groundwater, both the chemical status and the quantitative must be determined. Both have to be classed as either *good* or *poor*. The WFD sets out a series of criteria that must be met for a body to be classed as good chemical and quantitative status.

The WFD status (2016-2021) of all groundwater underlying the Plan area (mapped on Figure 4.8) is currently identified as being of *good status*, meeting the objectives of the WFD.

4.9.6 Aquifer Vulnerability and Productivity

The Geological Survey of Ireland (GSI) rates groundwaters according to both their productivity and vulnerability to pollution.

Aquifer vulnerability refers to the ease with which pollutants of various kinds can enter into groundwater. The aquifers underlying most the Plan area are mapped on Figure 4.9 and classified as a mix of vulnerabilities:

- High and Extreme vulnerability and Extreme (Rock at or near surface or karst), in parts of the south of the Plan area; and
- Moderate vulnerability, in parts of the south of the Plan area; and
- Low vulnerability, in parts of the north of the Plan area.

The GSI also rates aquifers based on the hydrogeological characteristics and on the value of the groundwater resource. This is referred to as aquifer productivity and is mapped on Figure 4.10. Aquifers in the vicinity of the Plan area are classified as being 'Locally Important Aquifer – bedrock which is moderately productive only in local zones' and 'Poor Aquifer – bedrock which is generally unproductive except for Local Zones'.

4.9.7 WFD Registers of Protected Areas

The WFD requires that Registers of Protected Areas (RPAs) are compiled for a number of water bodies or part of water bodies which

³⁷ https://gis.epa.ie/EPAMaps/Water

³⁸ Dundrum Local Area Plan 2023

must have extra controls on their quality by virtue of how their waters are used by people and by wildlife.

The WFD requires that these RPAs contain: areas from which waters are taken for public or private water supply schemes; designated shellfish production areas; bathing waters; areas which are affected by high levels of substances most commonly found in fertilizers, animal and human wastes - these areas are considered nutrient sensitive; areas designated for the protection of habitats or species e.g. Salmonid areas; Special Areas of Conservation (SACs); and, Special Protection Areas (SPAs). Also refer to Section 4.6.5.

The groundwater underlying the Plan and surrounding areas are used for drinking water abstraction in accordance with European Communities (Drinking Water) (No. 2) Regulations 2007 (S.I. No. 278/2007) and are identified on the RPAs for Drinking Water Ground or Surface Water Bodies (mapped on Figure 4.11) and RPAs for Groundwater in Nutrient Sensitive Areas³⁹.

4.9.8 Flooding

A Strategic Flood Risk Assessment (SFRA) document accompanies this SEA Environmental Report and the Plan. Requirements in relation to SFRA are provided under 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (Department of Environment and Office of Public Works, 2009) and associated Department of the Environment, Community and Local Government Circular PL2/2014.

Flood risk management and drainage provisions are already in force through the Dún Laoghaire-Rathdown County Development Plan 2022-2028 and related provisions have been integrated into the Plan. In addition, land use zoning within the Plan area has been informed by the SFRA process and associated delineation of flood risk zones.

Historical flooding is documented by the Office of Public Works (see Figure 4.12). The most significant source of flood risk within the Plan area is from fluvial (from rivers and streams), however there are other sources of flooding

present including pluvial (from rainwater) and risk from surface drainage systems.

Predictive flood risk mapping is also available from the Office of Public Works and is included in the SFRA document that accompanies the Plan.

4.9.9 Existing Problems

Subject to exemptions provided for by Article 4 of the WFD, based on available water data, the recorded status of certain surface and groundwater bodies will need improvement in order to comply with the objectives of the WFD. The Plan includes provisions that will contribute towards improvements in the status of waters.

The potential risk of uncontrolled run-off into the River Slang is in evidence at various locations throughout the Plan area, in particular where commercial activities and construction sites back on to the river. One of the key themes of Appendix 14 "Green Infrastructure Strategy" of the Dún Laoghaire-Rathdown County Development Plan 2022-2028 is "Water Management", which is based on the role and potential of Green Infrastructure to better manage surface and flood water and to contribute to maintaining and improving the quality of water in the County.⁴⁰

There is historic and predictive evidence of elevated levels of flood risk from fluvial sources at various locations across the Plan area. The preparation of the Plan, SEA and SFRA has taken place concurrently and the findings of the SFRA have informed both the Plan and the SEA.

³⁹ Groundwater bodies that intersect with areas designated as sensitive under the Urban Wastewater Treatment Directive (91/271/EEC) and transposing Regulations.

⁴⁰ Dundrum Local Area Plan 2023

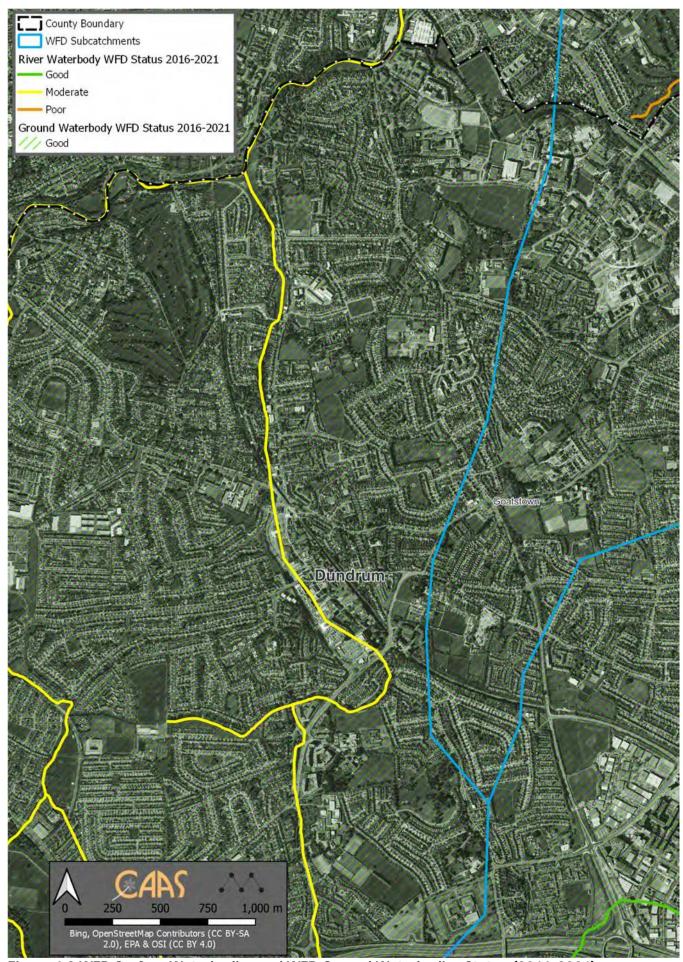


Figure 4.8 WFD Surface Waterbodies and WFD Ground Waterbodies Status (2016-2021)



Figure 4.9 Groundwater Vulnerability



Figure 4.10 Aquifer Productivity



Figure 4.11 WFD RPA Drinking Water

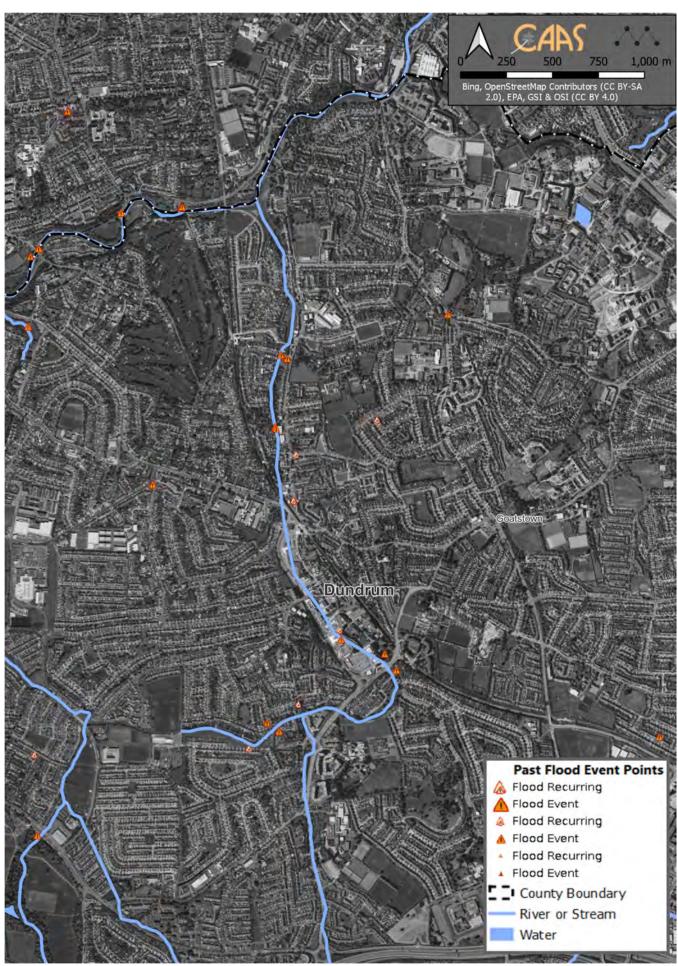


Figure 4.12 OPW Past Flood Events

4.10 Air and Climatic Factors

4.10.1 Climatic Factors

Interactions with climatic factors are also present with other environmental components including water/flooding (see Section 4.9.8).

Total emissions of greenhouse gases by humans come from various sectors including transport, agriculture, energy industries, manufacturing combustion, industrial residential developments, processes, commercial services developments, waste management processes and fluorinated gases equipment (such as refrigeration and fire protection systems).

Ireland's Provisional Greenhouse Gas Emissions 1990-2020 (EPA, 2021) report details provisional estimates of greenhouse gas emissions for the period 1990-2020. In 2020 total national greenhouse gas emissions are estimated to have declined by 3.6% on 2019 levels to 57.70 million tonnes carbon dioxide equivalent (Mt CO2eq). This reduction in total emissions was driven by the COVID impact on transport and less peat used for electricity Ιt highlights that generation. transformative measures will be needed to meet national climate ambitions.

Greenhouse gas emissions from the transport sector decreased by 15.7% or 1.92 Mt CO_2 eq in 2020. This decrease was largely driven by the impact of COVID restrictions on passenger car and public transport usage. International aviation, not included in the national total emissions, declined by 65% in 2020 or by 2.17 Mt CO_2 eq.

The EPA 2022 publication *Ireland's Greenhouse Gas Emission Projections 2021-2040* provides an assessment of Ireland's total projected greenhouse gas emissions from 2021 to 2040, updated using the latest Inventory data for 2020. The report provides an assessment of Ireland's progress towards achieving its national ambitions under the Climate Action and Low Carbon Development (Amendment) Act 2021 and EU emission reduction targets for

2030 as set out under the Effort Sharing Regulation⁴¹ Key findings identified as part of the report are that:

- Urgent implementation of all climate plans and policies, plus further new measures, are needed for Ireland to meet the 51 per cent emissions reduction target and put Ireland on track for climate neutrality by 2050.
- Ireland can meet its non-ETS EU targets of a 30 per cent emission reduction by 2030 (compared to 2005) assuming implementation of planned policies and measures and the use of the flexibilities available. These include a land use flexibility using the Climate Action Plan 2021 afforestation rate of 8,000 hectares per annum.
- The gap between the 'Existing Measures' and 'Additional Measures' scenarios in these projections highlights that the current pace of implementation will not achieve the change required to meet the Climate Act targets. Faster implementation of 'Additional Measures' is needed to close this gap.
- Carbon budgets proposed by the Climate Change Advisory Council have recently been approved by the Oireachtas for the periods 2021-25, 2026-30 and 2031-35. The Projections highlight that there is currently a significant gap between the budgets and the projected emissions over the budget periods. This gap will need to be addressed very quickly if Ireland is to stay within the Carbon Budgets.
- Under the Additional Measures scenario, renewable energy is projected to increase to 78 per cent of electricity generation by 2030 with emissions from the Energy Industry decreasing by 10 per cent per annum from 2021-30.
 Increased coal use from 2021 and growing energy demand, including from data centres, threaten to negatively impact achievement of National targets, particularly for the first carbon budget period.
- Under the Existing Measures scenario emissions are projected to increase by 1.9 per cent over the 2020-2030 period. A methane emissions reduction of almost 30 per cent is required to achieve a 22 per cent reduction in agriculture emissions compared to 2018, as committed to in the 2021 Climate Action Plan. The sector must clearly set out how this will be achieved to address uncertainty regarding its ability to deliver even the lower end of the range of its sectoral targets within the ever-shortening timeframe to
- The end of COVID travel restrictions is projected to result in transport emissions increasing by 18-19 per cent from 2020 to 2022. Emissions from the sector are projected to reduce to 39 per cent below 2018 levels by 2030 and achieve a 31.7 per cent renewable transport share if the additional measures in plans and policies are implemented, this includes over 940,000 electric vehicles on the road by 2030, increased biofuel blend rates and measures to support more sustainable transport.

from 2021 to 2030 contributing to climate action to meet commitments under the Paris Agreement.

 $^{^{\}rm 41}$ Regulation (EU) 2018/842 of on binding annual greenhouse gas emission reductions by Member States

Spending more time at home due to hybrid working and the increasing cost of fossil fuels highlights the need for our houses to become far more efficient. Implementing currently planned measures for the installation of 680,000 heat-pumps by 2030 as well as retrofitting 500,000 homes is projected to achieve a 41.5 per cent reduction in residential emissions in 2030 (compared to 2018).

4.10.2 Climate Mitigation and Adaptation

Climate mitigation describes the action to reduce the likelihood of climate change occurring or reduce the impact if it does occur. This can include reducing the causes of climate change (e.g. emissions of greenhouse gases) as well as reducing future risks associated with climate change.

The National Climate Action Plan 2023 provides a detailed plan for taking decisive action to achieve a 51% reduction in overall greenhouse gas emissions by 2030 and setting Ireland on a path to reach net-zero emissions by no later than 2050, as set out in the Climate Act 2021. The Plan lists the actions needed to deliver on climate targets and sets indicative ranges of emissions reductions for each sector of the economy. It will be updated periodically, to ensure alignment with legally binding economywide carbon budgets and sectoral ceilings.

Climate adaptation is a change in natural or human systems in response to the impacts of climate change. These changes moderate harm or exploit beneficial opportunities and can be in response to actual or expected impacts.

The National Adaptation Framework Department of Communications, Climate Action and Environment, 2018), sets out the national strategy to reduce the vulnerability of the country to the negative effects of climate change and to avail of positive impacts. The National Adaptation Framework outlines a whole of government and society approach to climate adaptation. Under the Framework, a number of Government Departments will be required to prepare sectoral adaptation plans in relation to a priority area that they are responsible for.

The statutory Climate Change Adaptation Plan for the Transport Sector was prepared under the Climate Action and Low Carbon Development Act (2015) and the National Adaptation Framework (2018) and published by the Department of Transport in 2019. The Plan sets out the national strategy to reduce Ireland's vulnerability to the negative effects of climate change and to avail of any positive impacts, with an objective to help develop resilience within the sector in order to safeguard transport infrastructure from future climate impacts.

Climate change mitigation objectives are integral to the Plan, including, inter alia, the concept of ten minute neighbourhoods, proximity to high quality public transport, public improvements, transport accessible employment and sustainable neighbourhood Infrastructure, compact growth, efficiency in new buildings and urban greening of the area through Green Infrastructure and Nature Based Solutions (including landscaping, SuDS, creating permeable green areas, and providing green roofs, restoring habitats such as wetlands, woodlands and hedgerows to absorb/sequester carbon dioxide).

As identified in the Plan the integration of energy and carbon reduction measures into the life cycle of all new residential and nonresidential buildings, from the neighbourhood, street and individual building scale, can result in significant savings at the local level. As stated in the Dún Laoghaire-Rathdown County Development Plan 2022-2028, the planning Authority will support and encourage buildings of innovative design which seek to achieve Passive or Net Zero Carbon design standards and support the use of structural materials that have low to zero embodied energy and CO2 emissions. All major developments within the Plan area will be encouraged to develop district heating where appropriate⁴².

The Dún Laoghaire-Rathdown County Council Climate Change Action Plan 2019-2024 features a range of actions across sectors, including agriculture, forestry, biodiversity, built and archaeological heritage, transport infrastructure, electricity and gas networks, communication networks, flood risk management, water quality, water services infrastructure and health. The Action Plan seeks to:

 Ensure a proper comprehension of the key risks and vulnerabilities of climate change;

⁴² Dundrum Local Area Plan 2023

- 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 Dún Laoghaire-Rathdown County Council.

Under the National Climate Action Plan 2023. Dún Laoghaire-Rathdown County Council is required to prepare a locally specific climate action plan for its administrative area. Once adopted, this plan will be valid for five years, and is subject to update at least every five years. The Dún Laoghaire-Rathdown County Council Climate Action Plan will be developed over the coming year and will contribute towards addressing the mitigation greenhouse gas emissions, climate change adaptation, and strengthening the alignment between national climate policy and the delivery of local climate action. The Dún Laoghaire-Rathdown County Council Climate Action Plan must cover the following areas:

- An emphasis on a place-based approach to climate action, delivering a better understanding of greenhouse gas emissions and climate-related risks at a local level;
- Context-specific conditions and locally-tailored policy making;
- Evidence-based and integrated climate action through adaptation and mitigation measures, centred around an understanding of the role of the Council in climate action; and
- Strategic direction at local and community levels on the delivery of the national climate objective.

4.10.3 Alternative Fuels and Renewable Electricity Generation Targets

The use of alternative fuels, including electricity, forms a significant part of reduce government policy to transport emissions. The Plan facilitates a mode shift away from the private car to public transport, walking and cycling and provisions relating to electric vehicles. This will contribute towards reductions in the consumption of nonrenewable energy sources and achievement of legally binding renewable energy targets.

The first Renewable Energy Directive (RED)⁴³ was the most important legislation influencing the growth of renewable energy in the EU and Ireland for the decade ending in 2020. From

The overall renewable energy share is referred to as the overall RES target. REDII introduced a binding EU-wide target for overall RES of 32% in 2030 and requires Member States to set their national contributions to the EU-wide target. As per the National Energy and Climate Plan (NECP) 2021-2030, Ireland's overall RES target is 34.1% in 2030. The sectoral targets are referred to as RES-E (electricity), RES-T (transport) and RES-H (heat). Ireland's NECP 2021-2030 set targets for RES-E of 70%, RES-H of 24% and RES-T of 14%, by 2030.45

4.10.4 Energy Security

Greater use of alternative fuels, including renewable energy, has the potential to further contribute towards energy security.

Indigenous production accounted for 32% of Ireland's energy requirements in 1990. mid-1990s However, since the import dependency had grown significantly, due to the increase in energy use together with the decline in indigenous natural gas production at Kinsale since 1995 and decreasing peat production. Ireland's overall import dependency reached 90% in 2006. It varied between 85% and 90% until 2016 when it fell to 69%. This trend reflects the fact that Ireland is not endowed with significant indigenous fossil fuel resources and has only in recent years begun to harness significant quantities of renewable resources and more recently natural gas from the Corrib field.

4.10.5 Ambient Air Quality

In order to protect human health, vegetation and ecosystems, EU Directives set down air quality standards in Ireland and the other Member States for a wide variety of pollutants. These pollutants are generated through fuel combustion, in space heating, traffic, electricity

^{2021,} RED was replaced by the second Renewable Energy Directive (REDII)⁴⁴, which continues to promote the growth of renewable energy out to 2030. RED set out two mandatory targets for renewable energy in Ireland to be met by 2020, while REDII sets new targets and criteria to be met by Ireland in 2030 and the interim.

 $^{^{\}rm 43}$ Directive 2009/28/EC on the promotion of the use of energy from renewable sources.

 $^{^{\}rm 44}$ Directive (EU) 2018/2001 on the promotion of the use of energy from renewable resources (recast).

⁴⁵ SEAI (2022): Energy in Ireland 2022 Report. Available at: https://www.seai.ie/publications/Energy-in-Ireland-2022.pdf

generation and industry and, in sufficient amounts, could affect the well-being of the areas inhabitants. The EU Directives include details regarding how ambient air quality should be monitored, assessed and managed.

The principles to this European approach are set out in the Ambient Air Quality and Cleaner Air for Europe (CAFE) Directive (2008/50/EC) (which replaces the earlier Air Quality Framework Directive 1996 and the first, second and third *Daughter Directives*; the fourth *Daughter Directive* will be included in CAFE at a later stage).

In order to comply with the directives mentioned above, the EPA measures the levels of a number of atmospheric pollutants. For the purposes of monitoring in Ireland, four zones are defined in the Air Quality Standards Regulations 2002 (S.I. No. 271 of 2002).

The EPA's (2022) *Air Quality in Ireland 2021* identifies that:

- Air quality in Ireland is generally good, however, there are localised issues.
- Ireland met all of its EU legal requirements in 2021 but it failed to meet the new WHO-based quideline levels for Health in 2021.
- Air quality monitoring results in 2021 showed that fine particulate matter (PM_{2.5}) mainly from burning solid fuel, and nitrogen dioxide (NO₂) mainly from road transport, remain the main threats to good air quality.
- It is estimated that there are approximately 1,300 premature deaths annually in Ireland due to poor air quality from fine particulate matter (PMs).

With regards to solutions, the report identifies that:

- Ireland and Europe should move towards achieving the health-based WHO air quality quidelines.
- The planned National Clean Air Strategy for Ireland needs to be published and fully implemented.
- Local Authorities must provide more resources to increase air enforcement activities.
- National investment in clean public transport is needed across the country.

In order to apply with European Directives relating to air quality, the EPA manages the National Ambient Air Quality Network and measures the levels of a number of atmospheric pollutants at locations across the country.⁴⁶

4.10.6 Noise

Noise is unwanted sound. 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 EU 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 who may be impacted upon as a result of excessive noise levels;
- Draw up action plans to reduce noise where necessary and maintain environmental noise quality where it is good; and,
- Inform and consult the public about noise exposure, its effects, and the measures considered to address noise.

In compliance with the Directive and transposing Environmental Noise Regulations (S.I. No. 140 of 2006), Noise Action Plans have been prepared for each local authority area within the country, including for Dún Laoghaire-Rathdown County Council ('Dublin Agglomeration Environmental Noise Action Plan 2018-2023'). The purpose of the Noise Action Plan is to avoid, prevent and reduce, on a prioritised basis the harmful effects, including annoyance due to the long-term exposure to environmental noise.

4.10.7 Existing Problems

The Climate Change Advisory Council's *The Annual Review 2021* raised the issue of the implementation gap whereby ambition on climate policy was not being matched by verifiable actions. Several issues regarding implementation continue to cause concern and are re-emphasised throughout *The Annual Review 2022*, such as: achieving compliance with national and EU targets will require a significant acceleration in the planning of new measures; and full and rapid implementation of already announced measures will be necessary to achieve these goals.

Air quality and noise present challenges, especially in urban areas, as detailed under the relevant sub-sections above. With regard to air

⁴⁶ For more detail on current daily air quality data for the Plan refer to: https://gis.epa.ie/EPAMaps/.

quality, air pollution from transport is dominated by NO_x emissions. Of these, NO_2 is particularly impactful from a health perspective. The Plan will help to facilitate reductions in emissions and a transition from dependence on fossil fuel combustion powered transport.

4.11 Material Assets

Other material assets, in addition to those detailed below, covered by the SEA include archaeological and architectural heritage (see Section 4.12) natural resources of economic value, such as water and air (see Sections 4.9 and 4.10).

4.11.1 Public Assets and Infrastructure

Public assets and infrastructure that have the potential to be impacted upon by the Plan, if unmitigated, include: resources such as public open spaces, parks and recreational areas; public buildings and services; transport and utility infrastructure (electricity, gas, telecommunications, water supply, waste water infrastructure etc.); and natural resources that are covered under other topics such as water and soil.

4.11.2 Land

The Plan has the potential to assist with the reuse and regeneration of brownfield sites thereby contributing towards sustainable mobility and reducing the need to develop greenfield lands and associated potential adverse environmental effects. Brownfield lands are generally located within urban/suburban areas.

There are two strategic regeneration sites within the LAP area, namely the Former Central Mental Hospital and Dundrum Town Centre Phase 2 lands.

4.11.3 Green Infrastructure

Parks and open space promote health and wellbeing, provide recreational facilities and range of habitats for various species. Green infrastructure (GI) is also a crucial component in building resilient communities capable of adapting to the consequences of climate change with trees, woodlands and wetlands providing carbon capture and slowing water flows while improving air quality.

The GI concept at the Local Area Plan level is about ensuring that the approach to development in Dundrum is integrated with the county wide green infrastructure network and method. The Plan area includes and adjoins green spaces and waterways, providing linkages between these areas, enhancing their ecological and biodiversity role and utilising them in both nature based solutions and in climate action measures.⁴⁷

4.11.4 Forestry

Some parts of the Plan area are covered by forestry. Woodlands provide recreational opportunities in addition to their heritage and economic benefits. They are a valuable resource in terms of biodiversity, recreation and tourism, and also important as links in the green infrastructure network (see Section 4.6.6).

4.11.5 Transport

Dundrum is currently served by the Green Line Luas, which provides public transport to Dublin City Centre, North Dublin and South Dublin. Dundrum is also served by Dublin Bus, providing routes to Dublin Airport, Dublin City Centre and Tallaght.

Significant improvements to public transport is planned for the area including, inter alia, the Luas capacity enhancement and the BusConnects network redesign. There will also be a new bus interchange facility within Dundrum connecting services to the Green Luas Line. The existing road network around Dundrum reaches capacity during peak commuter and shopping periods leading to congestion and delay.

There are accessibility issues for pedestrians accessing Dundrum major town centre from the east and west. The Luas line causes some severance to the east. Steep gradients and the Dundrum Bypass act as a barrier to the west. There is no cycle infrastructure on key local routes accessing the town centre such as Kilmacud Road Upper, Ballinteer Road and

⁴⁷ Dundrum Local Area Plan 2023

Dundrum Road. Recent mobility and public space enhancement works have significantly improved the public realm on Main Street and the northern end of Sandyford Road, and made it a more attractive environment for walking and cycling.

Relevant recommendations arising from the Area Based Transport Assessment (ABTA) have been integrated into the Plan to help ensure a shift towards more sustainable modes of transport.

4.11.6 Minerals and Aggregates

The GSI have a suite of data sources available that may be useful in planning and assessing individual projects with regard to the environmental topic(s) of soil and/or material assets. These include:

- Aggregate Potential Mapping;
- Bedrock mapping;
- Quaternary and Physiographic mapping; and
- National Aquifer and Recharge mapping.

4.11.7 Water Services

4.11.7.1 Wastewater

The EPA's 2022 report 'Urban Waste Water Treatment in 2021' identified that:

- 12 large urban areas that did not meet European Union treatment standards in 2021 require improvements to comply with these standards;
- 32 towns and villages discharging raw sewage into the environment every day must be connected to wastewater treatment plants;
- 6 collecting systems (sewers) must be upgraded to address the findings of a judgement from the Court of Justice of the European Union;
- 38 priority areas require improvements to protect rivers, lakes, estuaries and coastal waters that are adversely impacted by wastewater; and
- 12 areas need improvements in wastewater treatment to protect endangered freshwater pearl mussels.

Based on the EPA's assessment of monitoring information provided by Uisce Éireann and the enforcement activities carried out by the EPA, this report identifies urban areas with the most important environmental issues that must be addressed.

From January 2014, Uisce Éireann became responsible for all public water services,

involving the supply of drinking water and the collection, treatment and disposal of waste water. Uisce Éireann is also responsible for the treatment and disposal of the sludge that is generated from both its water and waste water treatment plants. The Council is an agent of Uisce Éireann for operations and remains the designated Water Authority for the assessment and approval of on-site wastewater treatment systems and is responsible for surface water drainage in the town.

The provision of well-maintained quality waste water treatment infrastructure is essential to facilitating sustainable development of the Dundrum while also protecting the environment and public health. Uisce Éireann is now responsible for the collection, treatment and disposal of waste water where public wastewater facilities exist in towns and villages.

Uisce Éireann, working in partnership with Dún Laoghaire-Rathdown County Council, is making investments to undertake essential upgrade works to waste water treatment plants in towns and villages across the County. The upgrading of infrastructure will contribute towards compliance with the Water Framework Directive, EU Urban Waste Water Treatment Directive and Drinking Water Regulations and will help to protect human health and maintain the quality of surface and ground waters.

4.11.7.2 Wastewater Infrastructure

The Wastewater Treatment Plant (WWTP) serving Dundrum is currently listed as a priority area (such areas are those where improvements are required to resolve urgent environmental issues).⁴⁸

The Plan area is served by the Ringsend Wastewater Treatment Plant (WWTP) located in the north-west part of the Dublin City, which has a design capacity of 1.64 million Population Equivalent (PE).

The Ringsend WWTP (Registration No. D0034-01) is currently not compliant with the Emission Limit Values (ELVs) set in the Wastewater Discharge Licence in the most recent available Annual Environmental Report 2021 (published in March 2023). The non-compliances were due to capacity issues and ongoing works at the WWTP.⁴⁹

⁴⁸ https://www.epa.ie/publications/compliance--enforcement/waste-water/priority-areas-list-current.php

⁴⁹http://epawebapp.epa.ie/licences/lic_eDMS/090151b280 8692cb.pdf

Major works underway to facilitate the Ringsend WWTP to treat the increasing volumes of wastewater arriving at the plant to the required standard include: upgrade of the treatment plant; connecting the Howth (Doldrum Bay) area to Ringsend WWTP; and an action plan to address pressure on waters at risk of pollution. Uisce Éireann is working to provide infrastructure to achieve compliance with the Urban Wastewater Treatment Directive for 2.1 million (PE) in the second half of 2023. As indicated by Uisce Éireann, there will be spare capacity available at the plant upon completion of an upgrade project.50 When all the proposed works are complete in 2025, the Ringsend WWTP will be able to treat wastewater for up to 2.4 million (PE), while meeting the required standards.

4.11.7.3 Water Supply

Uisce Éireann is responsible for providing and maintaining adequate public water supply infrastructure throughout the county.

Dundrum is located within the Greater Dublin Area Regional Water Resource Zone (WRZ)⁵¹ and currently served by the Saggart – Ballymore Eustace Water Supply.⁵² As identified by Uisce Éireann, there is a potential capacity available to support 2031 population targets.⁵³

Under Section 58 of the Environmental Protection Agency Act 1992, the EPA is required to collect and verify monitoring results for all water supplies in Ireland covered by the European Communities (Drinking Water) Regulations, 2000. The EPA publishes their results in annual reports that are supported by Remedial Action Lists (RALs). The RAL identifies water supplies that are not in compliance with the Regulations mentioned above. The most recent EPA Remedial Action List (Q4 of 2022, published in February 2023)⁵⁴ does not include any water scheme that supplies the Plan area.

Dún Laoghaire-Rathdown County Council is responsible for surface water drainage in the Plan area. Sustainable urban Drainage systems (SuDS) is a method to minimise the quantity and increase the quality of surface water runoff and to mitigate adverse impacts of climate change. SuDS can also provide amenity and biodiversity benefits. The Council seeks to ensure the sustainable management of surface water discharges in urban areas through the use of SuDS.

4.11.8 Waste Management

Waste management within the Plan area is guided by the Eastern-Midlands Waste Management Plan 2015-2021. The Plan provides a framework for the prevention and management of waste in a sustainable manner in eight local authority areas, including that of Dún Laoghaire-Rathdown's County Council's. The Plan provides a framework for the prevention and management of waste in a sustainable manner in ten local authority areas, including Dún Laoghaire-Rathdown County Council.

There are three Region Waste Management Plans in Ireland and these will be replaced by a new National Waste Management Plan for a Circular Economy, which will take account of the various measures outlined in A Waste Action Plan for A Circular Economy - Ireland's National Waste Policy 2020-2025.

4.11.9 Existing Problems

The provisions of the Plan will contribute towards protection of the environment with regard to impacts arising from material assets.

services/capacity-registers/water-supply-capacity-register/dublin/

^{4.11.7.4} Surface Water Drainage

Irish Water: Settlements with Waste Water Discharge Authorisations - Wastewater Treatment Capacity Register.
 The register provides an indication of available wastewater treatment capacity based on loads received in 2021 and available treatment plan capacity now or by completion of a project by 2024 (where relevant). Available at: https://www.water.ie/connections/developer-services/capacity-registers/wastewater-treatment-capacity-register/Dublin/ (Published in June 2022).
 A Water Resource Zone (WRZ) is an independent water

⁵¹ A Water Resource Zone (WRZ) is an independent water supply system serving a region, city, town or village and is governed by topography or the extent of the water distribution network in an area. A WRZ may include multiple Water Treatment Plants and/or sources.

⁵² https://www.dlrcoco.ie/en/water/supply-areas-sources

⁵³ Irish Water: Capacity Available to meet targeted population growth to 2031 although an improvement to the Level of service (LoS) will be required. This may take the form of leakage reduction and/or capital investment to maintain/improve levels of service as the demand increases. Proposed solutions will be developed & prioritised through the National Water Resources Plan and investment planning process. https://www.water.ie/connections/developer-

⁵⁴ https://www.epa.ie/publications/compliance-enforcement/drinking-water/annual-drinking-waterreports/epa-drinking-water-remedial-action-list-q4-of-2022.php

The provisions of infrastructure and supporting services for development, particularly water and wastewater services, is critical.

4.12 Cultural Heritage

4.12.1 Archaeological Heritage

Archaeology is the study of past societies through the material remains left by those societies and the evidence of their environment. Archaeological sites and monuments vary greatly in form and date; examples include earthworks of different types and periods, (e.g. early historic ringforts and prehistoric burial mounds), megalithic tombs from the Prehistoric medieval buildings, period, urban archaeological deposits and underwater features.

Archaeological heritage is protected under the National Monuments Acts (1930-2004), Natural Cultural Institutions Act 1997 and the Planning Acts.

The Record of Monuments and Places (RMP) is an inventory, put on a statutory basis by amendment to the National Monuments Act 1994, of sites and areas of archaeological significance, numbered and mapped. It is available from the National Monuments Service and at archaeology.ie.

The term 'monument' includes all man-made structures of whatever form or date except buildings habitually used for ecclesiastical purposes. All monuments in existence before 1700 A.D. are automatically considered to be historic monuments within the meaning of the Acts. Monuments of architectural and historical interest also come within the scope of the Acts. Monuments include: any artificial or partly artificial building, structure or erection or group of such buildings, structures or erections; any cave, stone or other natural product, whether or not forming part of the ground, that has been artificially carved, sculptured or worked upon or which (where it does not form part of the place where it is) appears to have been purposely put or arranged in position; any, or any part of any, prehistoric or ancient tomb, grave or burial deposit, or, ritual, industrial or habitation site; and any place comprising the remains or traces of any such building, structure or erection, any

Figure 4.13 shows the spatial distribution of recorded monuments within the Plan area and includes the zone of archaeological potential, centred around Saint Nahi's Church and Cemetery and Dundrum Library, as well as Dundrum Castle. The Airfield Estate, a 15-hectare urban farm lies within the Plan area and is a unique feature of Dundrum's heritage. There are number of entries to the RMP within the Plan area (mapped on Figure 4.13) comprising:

- Ecclesiastical enclosure located at Churchtown Road Upper, which encompasses three recorded monuments (No. DU022-016001- Ecclesiastical enclosure; No. DU022-016002- Church; and No. DU022-016003- Graveyard;)⁵⁵;
- Dundrum Castle ruins, which encompasses two recorded monuments: No. DU022-023001-Castle - tower house; and No. DU022-023002-Castle - Anglo-Norman masonry castle.
- The Mill Pond/Mill Race, No. DU022-100001-Redundant Record, previously recorded to the west of Main Street. This site is not scheduled for inclusion in the next revision of the RMP.

Underwater Archaeology Unit was established within the National Monuments Service to manage and protect Ireland's underwater cultural heritage, including the quantification of the underwater resource and assessing development impacts in order to manage and protect this aspect of Ireland's heritage. The Shipwreck Inventory is principally a desktop survey with information gathered a broad range of cartographic, archaeological and historical sources, both documentary and pictorial. Wrecks over 100 years old and archaeological objects found underwater are protected under the National Monuments (Amendment) Acts 1987 and 1994. Significant wrecks less than 100 years old can

the next revision of the RMP: SMR No. DU022-016004-Graveslab and SMR No. DU022-016005- Graveslab.

such cave, stone or natural product or any such tomb, grave, burial deposit or ritual, industrial or habitation site, situated on land or in the territorial waters of the State', but excludes 'any building or part of any building, that is habitually used for ecclesiastical purposes' (National Monuments Acts 1930-2004). A recorded monument is a monument included in the list and marked on the map which comprises the RMP set out county by county under Section 12 of the National Monuments (Amendment) Act, 1994 by the Archaeological Survey of Ireland. The definition includes Zones of Notification within which requirements for notifications of proposed works apply.

⁵⁵ An additional two monuments at the ecclesiastical enclosure are listed in the SMR and are due for inclusion in

be designated by Underwater Heritage Order on account of their historical, archaeological or artistic importance. Such Orders can also be used to designate areas of seabed or land covered by water to more clearly define and protect wreck sites and archaeological objects. Under the legislation all diving on known protected wreck sites or with the intention of searching for underwater cultural heritage is subject to licensing requirements.

Rivers within the Plan area may contain many features and finds associated with riverine heritage such as shipwrecks, piers, quay walls, fords, stepping stones and associated archaeological objects and features.

4.12.2 Architectural Heritage

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

Records of Protected Structures are legislated for under Section 12 and Section 51 of the Planning and Development Act 2000 as amended. Protected structures are defined in the Planning and Development Act 2000 as amended as structures, or parts of structures that are of special interest from an architectural, historical, archaeological, artistic, cultural, scientific, social or technical point of view.

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

- The interior of the structure;
- The land lying within the curtilage⁵⁶ of the structure;
- Any other structures lying within that curtilage and their interiors; and,
- All fixtures and features that form part of the interior or exterior of any structure or structures referred to in subparagraph (i) or (iii).

Similar to the general spatial spread of archaeological heritage, clusters of architectural heritage are indicated within the town's centre, as shown on Figure 4.14.

Protected Structures provided for by the Dún Laoghaire-Rathdown County Development Plan 2022-2028 within the Dundrum Plan area comprise:

- 1. Saint Nahi's Church (RPS No. 857)
- 2. Fernbank (RPS No. 823)
- 3. Carnegie Library (RPS No. 883)
- 4. Dundrum Railway Station (RPS No. 905)
- 5. Usher Monument (RPS No. 934)
- Terrace Houses at Sydenham Road (RPS No. 1924-1927 & 1952-1953)
- 7. Annefield (RPS No. 1040)
- 8. Dundrum Courthouse (RPS no. 1110)
- Holy Cross Church including railings and gates (RPS No. 1129)
- Holy Cross Church Parochial House (RPS No. 2095)
- 11. Mill House (RPS No. 1234)
- 12. Dundrum Castle (RPS No. 1319)
- 13. Ardglas House (RPS No. 1422)
- 14. Herbert Hill (RPS No. 1362)
- 15. Airfield House including original entrance piers, railings and gates (RPS No. 1204)
- 16. Central Mental Hospital:
 - a. Catholic Chapel (RPS No. 2071)
 - b. Hospital/Asylum (RPS No. 2072)
 - c. Hospital Building (RPS No. 2073)
- 17. Taney Hall (former Church of Ireland Hall) Eglinton Terrace (RPS No. 2091)
- 18. Ivy Grove (House), 1 Eglinton Terrace (RPS No. 2092)
- Eglinton House (House), 2 Eglinton Terrace (RPS No. 2093)
- Eglinton Lodge (House), Eglinton Terrace (RPS No. 2094)
- 21. Cullenagh, Stoney Road (RPS No. 2097)
- Former Church of Ireland School Building & Masters House, Eglinton Terrace (RPS No. 2106)
- 23. Overton, Kilmacud Road Upper (RPS No. 2126)
- 24. Herberton, Kilmacud Road Upper (RPS No. 2127)
- 25. No. 1 and 2 Sydenham Place (RPS No. 2129 & 2130)

An Architectural Conservation Area (ACA) is a place, area, group of structures or townscape, which is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or contributes to the appreciation of a Protected Structure. An ACA may or may not include Protected Structures. In an ACA, protection is placed on the external appearance of such areas or structures. There are four ACAs in Dundrum (shown on Figure 4.14): Dundrum ACA (which incorporates the Pembroke Cottages and substantial portion of

even buildings now in separate ownership, e.g. the lodge of a former country house, or the garden features located in land subsequently sold off. Such lands are described as being attendant grounds, and the protection extends to them just as if they were still within the curtilage of the Protected Structure.

⁵⁶ Curtilage is normally taken to be the parcel of ground immediately associated with the Protected Structure, or in use for the purposes of the structure. Protection extends to the buildings and land lying within the curtilage. While the curtilage sometimes coincides with the present property boundary, it can originally have included lands, features or

the Main Street); Sydenham Road ACA; Sydenham Villas ACA; and Campfield Terrace ACA.

The National Inventory of Architectural Heritage (NIAH) is a State initiative under the administration of the Department of Housing, Local Government and Heritage and was established on a statutory basis under the provisions of the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999. The purpose of the NIAH is to identify, record, and evaluate the post-1700 architectural heritage of Ireland, uniformly and consistently as an aid in the protection and conservation of the built heritage. NIAH surveys provide the basis for the recommendations of the Minister of Housing, Local Government and Heritage to the local authorities for the inclusion of particular structures in their Record of Protected Structures. The NIAH includes historic gardens and designed landscapes. Figure 4.14 shows entries to NIAH in the Plan area.

4.12.3 Existing Problems

The context of archaeological and architectural heritage has changed over time however no existing conflicts with legislative objectives governing archaeological and architectural heritage have been identified.



Figure 4.13 Archaeological Heritage



Figure 4.14 Architectural Heritage

4.13 Landscape

4.13.1 Introduction

Article 1 (a) of the European Landscape Convention provides a definition of landscape as follows; "Landscape means an area, as perceived by people whose character is the result of the action and interaction of natural/or human factors". The importance of landscape and visual amenity and the role of its protection are recognised in the Planning and Development Act 2000 as amended, which requires that Development Plans include objectives for the preservation of the landscape, views and the amenities of places and features of natural beauty.

As a major town centre, Dundrum is an important urban area in the County with a town centre that developed from the historic village of Dundrum. The Plan area, as defined in the existing Dún Laoghaire-Rathdown County Development Plan 2022-2028, has been extended to include lands at Fernbank, the former Notre Dame School site and adjoining open space zoned land to the south. The Plan covers a total area of approximately 168 hectares. There are two main areas identified in the Plan - the lands zoned "Major Town Centre" (MTC) at Dundrum and the former Central Mental Hospital site and surrounding area, which includes the Windy Arbour neighbourhood centre lands and Dundrum Business Park. The two areas are linked by the Dundrum Road, which contains a number of what are termed "opportunity sites".

The Dundrum Plan area encompasses the various parklands areas, individual gardens, communal open spaces, waterways including the River Slang, greens strips and wildlife areas, which adjoin the Luas line and roads and streets, lands at St. Nahi's cemetery, and the various species - both plant and animal - that occupy and/or pass through these areas.

Dundrum developed around a crossing point on the River Slang, with Dundrum Castle standing on the steeply sloping western side of the river. Although culverted in places, the River Slang is an important green/blue infrastructure corridor and habitat in the Dundrum area, providing multi-functional eco-system services such as land drainage, recreational amenity, clean/cool air and a wildlife corridor.

4.13.2 Landscape Character Assessment

The European Landscape Convention was ratified in Ireland in 2002, this required EU Member States to adopt national measures to promote landscape, planning, protection and management. The purpose of landscape character assessment is to provide the foundation for policy formulation and decision making for landscape management.

There are a range of different landscapes found in the Plan area, each with varying visual and amenity values, topography, exposure levels and each containing a variety of habitats. Each landscape type has varying capacity to absorb development related to its overall sensitivity.

The existing Dún Laoghaire-Rathdown CDP 2022-2028 identifies 14 Landscape Character Areas (to the south of Dundrum and the more established built envelope in the northern portion of Dún Laoghaire-Rathdown), Areas of High Amenity and several views and prospects within the Council's administrative area. There are no designated Landscape Character Areas, Areas of High Amenity, views or prospects within or adjacent to the Local Area Plan area.

Dundrum's area can be characterised as mainly urban, with one of the earliest places in Ireland with a purpose-built shopping centre known today as 'Dundrum Town Centre'.

4.13.3 Existing Environmental Problems

New developments have resulted in changes to the visual appearance of lands within the Plan area however legislative objectives governing landscape and visual appearance were not identified as being conflicted with.

Section 5 Strategic Environmental Objectives

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

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

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

All SEOs, indicators and targets are provided on Table 5.1 overleaf.

Further detail on legislation, plans and programmes are provided under Section 2 (and associated Appendix I "Relationship with Legislation and Other Policies, Plans, and Programmes") and Section 4.

Given the position of the Local Area Plan in the land use planning hierarchy beneath the Dún Laoghaire-Rathdown County Development Plan 2022-2028, the measures identified in that County Development Plan SEA have been used as they are or having been slightly modified. This consistency across the hierarchy of land use plans will improve the efficiency and effectiveness of future monitoring.

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Table 5.1 Strategic Environmental Objectives (SEOs), Indicators and Targets

Environmental	SEO	Guiding	Strategic Environmental Objectives	Indicators	Targets
Biodiversity, Flora and Fauna	Code BFF	Principle No net contribution to biodiversity losses or deterioration	To preserve, protect, maintain and, where appropriate, enhance the terrestrial, aquatic and soil biodiversity, particularly EU designated sites and protected species Ensure no adverse effects on the integrity of any European site, with regard to its qualifying interests, associated conservation status, structure and function Safeguard national, regional and local designated sites and supporting features which function as stepping stones for migration, dispersal and genetic exchange of wild species Enhance biodiversity in line with the National Biodiversity Strategy and its targets To protect, maintain and conserve natural capital	Condition of European sites Number of spatial plans that have included ecosystem services content, mapping and policy to protect ecosystem services when their relevant plans are either revised or drafted	Require all local level land use plans to include ecosystem services and green/blue infrastructure provisions in their land use plans and as a minimum, to have regard to the required targets in relation to the conservation of European sites, other nature conservation sites, ecological networks, and protected species Complete the review of the Dún Laoghaire-Rathdown Biodiversity Plan 2009-2013 and implement the revised Plan Require all local level land use plans to include ecosystem services and green/blue infrastructure provisions in their land use plans and as a minimum, to have regard to the required targets in relation to the conservation of European sites, other nature conservation sites, ecological networks, and protected species Complete the review of the Dún Laoghaire-Rathdown Biodiversity Plan 2009-2013 and implement the revised Plan
			 SEAs and AAs as relevant for new Council policies, plans, programmes etc. Status of water quality in the County's water bodies Compliance of planning permissions with Plan measures providing for the protection of Biodiversity and flora and fauna – see Chapter 8 "Green Infrastructure and Biodiversity" of the County Development Plan 	 Screen for and undertake SEA and AA as relevant for new Council policies, plans, programmes etc. Included under Water below For planning permission to be only granted when applications demonstrate that they comply with all Plan measures providing for the protection of biodiversity and flora and fauna – see Chapter 8 "Green Infrastructure and Biodiversity" of the County Development Plan 	
Population and Human Health	РНН	Improve quality of life for all ages and abilities based on high- quality, serviced, well connected and sustainable residential, working,	Promote economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management Ensure that existing population and planned growth is matched with the required public infrastructure and the required services Safeguard citizens from environment-related pressures and risks to health and well-being	Implementation of Plan measures relating to the promotion of economic growth as provided for by Chapter 6 "Enterprise and Employment Strategy" of the County Development Plan Number of spatial concentrations of health problems arising from environmental factors resulting from development	For review of progress on implementing Plan objectives to demonstrate successful implementation of measures relating to the promotion of economic growth as provided for by Chapter 6 "Enterprise and Employment Strategy" of the County Development Plan By 2020 all citizens will have access to speeds of 30Mbps, and that 50% of citizens will be subscribing to speeds of 100Mbps (Also relevant to Material Assets) No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan
		educational and recreational environments		Proportion of people reporting regular cycling / walking to school and work above previous CSO figures Number of spatial plans that include specific green infrastructure mapping	Increase in the proportion of people reporting regular cycling / walking to school and work above previous CSO figures Require all local level land use plans to include specific green infrastructure mapping

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Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives	Indicators	Targets
Soil (and Land)	S	Ensure the long-term sustainable management of land	Protect soils against pollution, and prevent degradation of the soil resource Promote the sustainable use of infill and brownfield sites over the use of greenfield sites Safeguard designated geological sites	Proportion of population growth occurring on infill and brownfield lands compared to greenfield (also relevant to Material Assets)	 Maintain built surface cover nationally to below the EU average of 4% as per the NPF. Achieve the 50% target for all new homes within and adjacent to the existing built-up footprint of Dún Laoghaire-Rathdown To map brownfield and infill land parcels across the County.
				Instances where contaminated material generated from brownfield and infill must be disposed of	Dispose of contaminated material in compliance with EPA guidance and waste management requirements
				Environmental assessments and AAs as relevant for applications for brownfield and infill development prior to planning permission	Screen for and undertake environmental assessments and AA as relevant for applications for brownfield and infill development prior to planning permission
Water	W	Protection, improvement and sustainable management of the water	Ensure that the status of water bodies is protected, maintained and improved in line with the requirements of the Water Framework Directive and Marine Strategy Framework Directive Ensure water resources are sustainably managed	Status of water bodies as reported by the EPA Water Monitoring Programme for the WFD	 Not to cause deterioration in the status of any surface water or affect the ability of any surface water to achieve 'good status' Implementation of the objectives of the second cycle of the River Basin Management Plan by 2021 (and subsequent iterations as relevant)
	resource to deliver proposed regional and targets in the context of existing water supply and wastew constraints ensuring the protection environments • Avoid inappropriate zoning and areas at risk of flooding and vulnerable to current and future • Integrate sustainable water solutions (such as SuDS, porous		to deliver proposed regional and County growth targets in the context of existing and projected water supply and wastewater capacity constraints ensuring the protection of receiving environments • Avoid inappropriate zoning and development in areas at risk of flooding and areas that are vulnerable to current and future erosion • Integrate sustainable water management solutions (such as SuDS, porous surfacing and green roofs) into development proposals	Number of incompatible developments permitted within flood risk areas	Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk
Material Assets	MA	Sustainable and efficient use of natural resources	Optimise existing infrastructure and provide new infrastructure to match population distribution proposals – this includes transport infrastructure Ensure access to affordable, reliable, sustainable and modern energy for all which encourages a broad energy generation mix to ensure security of supply – wind, wave solar, tidal, biomass, energy from waste and traditional fossil fuels Promote the circular economy, reduce waste, and increase energy efficiencies Ensure there is adequate sewerage and drainage infrastructure in place to support new development	Programmed delivery of Uisce Éireann infrastructure for all key growth towns in line with Uisce Éireann Investment Plan and prioritisation programme to ensure sustainable growth can be accommodated Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the Plan	 All new developments granted permission to be connected to and adequately and appropriately served by waste water treatment over the lifetime of the Plan Where septic tanks are proposed, for planning permission to be only granted when applications demonstrate that the outfall from the septic tank will not – in- combination with other septic tanks– contribute towards any surface or ground water body not meeting the objective of good status under the Water Framework Directive Facilitate, as appropriate, Uisce Éireann in developing water and wastewater infrastructure See also targets relating to greenfield and brownfield development of land under Soil and broadband under Population and Human Health

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Environmental	SEO	Guiding	Strategic Environmental Objectives	or the Dundrum Local Area Plan 2023 Indicators	Targets		
Component	Code	Principle	Strategic Environmental Objectives	mulcators	Talyets		
Component	oodc	Timospie	Reduce the energy demand from the transport sector and support moves to electrification of road and rail transport modes Encourage the transition to a zero-carbon economy by facilitating the development of a grid infrastructure to support renewables and international connectivity. Reduce the average energy consumption per capita including promoting energy efficient buildings, retrofitting, smart-buildings, cities and grids	Proportion of people reporting regular cycling / walking to school and work above previous CSO figures	Increase in the proportion of people reporting regular cycling / walking to school and work above previous CSO figures		
Air	Α	Support clean air policies that reduce the impact of air pollution on the environment and public health	 To avoid, prevent or reduce harmful effects on human health and the environment as a whole resulting from emissions to air from all sectors with particular reference to emissions from transport, residential heating, industry and agriculture Maintain and promote continuing improvement in air quality through the reduction of emissions and promotion of renewable energy and energy efficiency Promote continuing improvement in air quality Reduction of emissions of sulphur dioxide, nitrogen oxides, volatile organic compounds, ammonia and fine particulate matter which are responsible for acidification, eutrophication and ground-level ozone pollution Meet Air Quality Directive standards for the protection of human health — Air Quality Directive Significantly decrease noise pollution and move closer to WHO recommended levels 	 Proportion of journeys made by private fossil fuel-based car compared to previous National Travel Survey levels NO_x, SO_x, PM10 and PM2.5 as part of Ambient Air Quality Monitoring 	 Decrease in proportion of journeys made by private fossil fuel-based car compared to previous National Travel Survey levels Improvement in Air Quality trends, particularly in relation to transport related emissions of NO_x and particulate matter 		
Climatic Factors ⁵⁷	С	Achieving transition to a competitive, low carbon, climate-resilient economy that is cognisant of environmental impacts	 To minimise emissions of greenhouse gasses Integrate sustainable design solutions into infrastructure (e.g. energy efficient buildings; green infrastructure). Contribute towards the reduction of greenhouse gas emissions in line with national targets. Promote development resilient to the effects of climate change Promote the use of renewable energy, energy efficient development and increased use of public transport 	Implementation of Plan measures relating to climate reduction targets as provided for by Plan provisions including those provided for and referenced in Chapter 3 "Climate Action" of the County Development Plan A competitive, low-carbon, climate-resilient and environmentally sustainable economy Share of renewable energy in transport	 For review of progress on implementing Plan objectives to demonstrate successful implementation of measures climate reduction targets as provided for by Plan provisions including those provided for and referenced in Chapter 3 "Climate Action" of the County Development Plan Contribute towards transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050 Contribute towards the target of the Renewable Energy Directive (2009/28/EC), for all Member States to reach a 10% share of renewable energy in transport by facilitating the development of electricity charging and transmission infrastructure, in compliance with the provisions of the Plan 		

Flease also refer to relevant legislation and requirements under Section 4.10, Section 8.6, Section 8.8.3 and Appendix I. Targets under the national Climate Action Plan are reviewed and updated periodically and include those under the headings of Electricity, Built Environment, Transport, Agriculture, Forestry & Land Use and Enterprise.
 CAAS for Dún Laoghaire-Rathdown County Council

SEA Environmental Report for the Dundrum Local Area Plan 2023

Environmental	SEO	Guiding	Strategic Environmental Objectives	Indicators	Targets
Component	Code	Principle			
				 Carbon dioxide (CO₂) emissions across the electricity generation, built environment and transport sectors 	 Contribute towards the target of aggregate reduction in carbon dioxide (CO₂) emissions across the electricity generation, built environment and transport sectors
				 Energy consumption, the uptake of renewable options and solid fuels for residential heating 	 To promote reduced energy consumption and support the uptake of renewable options and a move away from solid fuels for residential heating
				 Proportion of journeys made by private fossil fuel-based car compared to previous levels 	 Decrease in the proportion of journeys made by residents of the County using private fossil fuel-based car compared to previous levels
				 Proportion of people reporting regular cycling / walking to school and work above previous CSO figures 	 Increase in the proportion of people reporting regular cycling / walking to school and work above previous CSO figures
Cultural Heritage			Protect places, features, buildings and landscapes of cultural, archaeological or architectural heritage	 Percentage of entries to the Record of Monuments and Places, and the context these entries within the surrounding landscape where relevant, protected from adverse effects resulting from development which is granted permission under the Plan 	 Protect entries to the Record of Monuments and Places, and the context of these entries within the surrounding landscape where relevant, from adverse effects resulting from development which is granted permission under the Plan
		design and positioning of development		 Percentage of entries to the Record of Protected Structures and Architectural Conservation Areas and their context protected from significant adverse effects arising from new development granted permission under the Plan 	Protect entries to the Record of Protected Structures and Architectural Conservation Areas and their context from significant adverse effects arising from new development granted permission under the Plan
Landscape	L	Protect and enhance the landscape character	To implement the County Development Plan's framework for identification, assessment, protection, management and planning of landscapes having regard to the European Landscape Convention	Number of developments permitted that result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in Land Use Plans, resulting from development which is granted permission under the Plan To seek to align with the National Landscape Strategy	No developments permitted which result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in Land Use Plans, resulting from development which is granted permission under the Plan

Section 6 Description of Alternatives

6.1 Introduction

The SEA Directive requires that reasonable alternatives (taking into account the objectives and the geographical scope of the plan or programme) are identified, described and evaluated for their likely significant effects on the environment. Alternatives for the Plan are identified under a number of types below and assessed in Section 7.

6.2 Limitations in Available Alternatives

The Plan is required to be prepared by the existing, already in force, Dún Laoghaire-Rathdown County Development Plan 2022-2028 and the Planning and Development Act 2000 (as amended), which specifies various types of objectives that must be provided for by the Plan.

The alternatives available for the Plan are significantly limited by the provisions of higher-level planning objectives, including those of the National Planning Framework (NPF), the Regional Spatial and Economic Strategy (RSES) for the Eastern and Midlands Region and the County Plan. These documents set out various requirements for the content of the Plan including on topics such as land use zoning.

6.3 Description of Alternatives Considered

6.3.1 Plan Boundary/Area Alternatives

Alternatives under this heading relate to the boundary that was brought forward as part of the Draft Plan and ultimately adopted as part of the Plan. A boundary for a Dundrum Local Area Plan is set out in the Dún Laoghaire-Rathdown County Development Plan. As part of the pre-draft consultation process and work on the draft LAP, an alternative to this boundary emerged that would include Dundrum Business Park and some of Glasson Park court open space to the north, lands at Fernbank, the former Notre Dame School site and adjoining open space zoned land to the south.

- Plan Boundary/Area Alternative 1: A Plan that covers the area set out in the Dún Laoghaire-Rathdown County Development Plan.
- Plan Boundary/Area Alternative 2: A Plan that incorporates the area set out in the Dún Laoghaire-Rathdown County Development Plan, Dundrum Business Park as well lands at Fernbank, the former Notre Dame School site and adjoining open space zoned land to the south.

6.3.2 Area Based Transport Assessment Alternatives

In line with the strategic county objectives of the County Development Plan, the creation of a compact and connected Dundrum could be achieved by integrating land use and transportation policy, thus promoting compact climate resilient growth and ensuring that people can easily access their homes, employment, education and the services they require by walking cycling or use of public transport. This would also tie in with the "10-minute neighbourhood" concept. An Area Based Transport Assessment would seek to maximise opportunities for the integration of land use and transport planning, with an emphasis on cycling, walking and public transport and delivering on the "10-minute neighbourhood" concept.

- Area Based Transport Assessment Alternative 1: Inform the Plan with an Area Based Transport Assessment, which focuses on delivering travel solutions that support moving people from the private car to more sustainable modes.
- Area Based Transport Assessment Alternative 2: Do not inform the Plan with an Area Based Transport Assessment, which focuses on delivering travel solutions that support moving people from the private car to more sustainable modes, relying solely on existing provisions, including those included as part of the County Development Plan. The Development Plan policy objectives are also focused on the ASI Avoid Improve and shift approach, but specific interventions such as those proposed in the LAP are not set out.

6.3.3 Ecosystem Services Approach Alternatives

The importance of fulfilling natural capital⁵⁸ and ecosystem⁵⁹ service obligations has increasingly emerged in recent years. An Ecosystems Services Approach would provide a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way. An Ecosystems Services Approach would include the integration of ecological considerations at a local level across the Plan area.

- Ecosystem Services Approach Alternative 1: A Plan that follows an Ecosystems Services Approach to a greater degree.
- Ecosystem Services Approach Alternative 2: A Plan that that does not follow, or follows to a lesser degree, an Ecosystems Services Approach.

6.3.4 Built Heritage Alternatives

Dundrum is rich in heritage that contributes positively to the identity and unique sense of place in the town. Heritage includes both built heritage and archaeological heritage. The conservation and preservation of this heritage is important for the County in terms of protecting the existing heritage and ensuring that new development respects the historic grain of the built environment and archaeology that currently exists. These alternatives consider the degree to which built heritage and conservation are provided for at a local level in Dundrum.

- **Built Heritage Alternative 1**: A Plan that adds detailed, local-level provisions to the existing planning framework relating to the conservation of built heritage.
- **Built Heritage Alternative 2**: A Plan that does not add detailed, local-level provisions to the existing planning framework relating to the conservation of built heritage, relying solely on existing provisions, including those included as part of the County Development Plan.

⁵⁸ Renewable and non-renewable resources (e.g. plants, animals, air, water, soils, minerals).

⁵⁹ Ecosystems are multifunctional communities of living organisms interacting with each other and their environment. Ecosystems provide a series of services for human well-being (ecosystem services) either directly or indirectly contributing towards human wellbeing.

6.3.5 Approach to Site Development Frameworks Alternatives

Land use zoning objectives, which provide for a wide range of potential uses, for the Plan area are set out in the Dún Laoghaire-Rathdown County Development Plan. Alternatives under this heading relating to Site Development Frameworks that would provide guidance for future planning applications at Key Development Sites across the Plan area.

- Approach to Site Development Frameworks Alternative 1: Do not include Site
 Development Frameworks that would provide location specific guidance for future planning
 applications at Key Development Sites; development would be market-led and would seek to
 comply with relevant planning provisions in the absence of additional guidance.
- Approach to Site Development Frameworks Alternative 2: Include Site Development Frameworks that would provide location specific guidance for future planning applications at Key Development Sites, but which allow for flexibility in final design, layout and uses.
- Approach to Site Development Frameworks Alternative 3: Include Site Development Frameworks that would outline criteria (which would not allow for flexibility in final design, layout and uses) for future planning applications at Key Development Sites.

6.3.6 Densities Alternatives

Alternatives identified relating to densities comprise:

- **Density Alternative 1**: Application of a single standard density across the whole Plan area in order to calculate the potential residential yield relating to land zoned for residential purposes for the Core Strategy.
- Density Alternative 2: Application of different densities at different locations, as appropriate; higher densities where more sustainable transport mode opportunities are available and lower densities where constraints are presented by, for example, cultural heritage designations or the local road network.

6.3.7 Transport Infrastructure Alternatives

In integrating provisions relating to the provision of transport infrastructure into the Plan, the following alternatives were considered:

- Transport Infrastructure Alternative 1: Provide new transport infrastructure with all additional environmental mitigation left to be defined until project level.
- Transport Infrastructure Alternative 2: Provide new transport infrastructure, subject to environmental constraints, including those related to habitats and potential impacts such as disturbance from lighting includes minimising river crossings, avoiding sensitive habitats, not increasing barriers to flood waters and sustainable design and construction techniques.

Section 7 Evaluation of Alternatives

7.1 Introduction

This section provides a comparative evaluation of the likely significant environmental effects⁶⁰ of implementing available alternatives that are described in Section 6. This determination sought to understand whether each alternative was likely to improve conflict with or have a neutral interaction with the receiving environment.

7.2 Methodology

The relevant aspects of the current state of the environment (see Section 4) and the Strategic Environmental Objectives (see Section 5 and Table 7.1) are used in the assessment of alternatives.

The alternatives are evaluated using compatibility criteria (see Table 7.2 below) in order to determine how they would be likely to affect the status of the existing environment and the SEOs. The SEOs and the alternatives are arrayed against each other in order to demonstrate which interactions would cause effects on specific components of the environment. Where the appraisal identifies an interaction with the status of an SEO the relevant SEO code is entered into the relevant column.

The interactions identified are reflective of likely significant environmental effects:

- Interactions that would be *likely to improve the status* of a particular SEO would be likely to contribute towards a significant positive effect on the environmental component to which the SEO relates, including in-combination with the existing statutory planning/decision-making and consent-granting framework.
- Interactions that would *potentially conflict with the status* of *an SEO and would be likely to be mitigated* would be likely to result in potential significant negative effects; however, these effects could be mitigated by integrating measures into the Plan.
- Interactions that would probably *conflict with the status of an SEO and would be unlikely to be mitigated* would be likely to result in a significant residual negative effect on the environmental component to which the SEO relates.

Effects considered include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects.

The degree of significance of effects occurring cannot be fully determined at this level of decision making due to the lack of exact detail available with regard to the type or scale of development that will be permitted under the Plan. However, a strategic assessment can be undertaken.

Table 7.1 Strategic Environmental Objectives⁶¹

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives
Biodiversity, Flora and Fauna	BFF	No net contribution to biodiversity losses or deterioration	 To preserve, protect, maintain and, where appropriate, enhance the terrestrial, aquatic and soil biodiversity, particularly EU designated sites and protected species Ensure no adverse effects on the integrity of any European site, with regard to its qualifying interests, associated conservation status, structure and function Safeguard national, regional and local designated sites and supporting features which function as stepping stones for migration, dispersal and genetic exchange of wild species Enhance biodiversity in line with the National Biodiversity Strategy and its targets To protect, maintain and conserve natural capital
Population and Human Health	РНН	Improve quality of life for all ages and abilities based on high-quality, serviced, well connected and sustainable residential, working, educational and recreational environments	Promote economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management Ensure that existing population and planned growth is matched with the required public infrastructure and the required services Safeguard citizens from environment-related pressures and risks to health and well-being

⁶⁰ These effects include secondary, cumulative (see also Section 8.2), synergistic, short, medium and long-term permanent and temporary, positive and negative effects.

⁶¹ See also Section 5

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives
Soil (and Land)	S	Ensure the long-term sustainable management of land	Protect soils against pollution, and prevent degradation of the soil resource Promote the sustainable use of infill and brownfield sites over the use of greenfield sites Safeguard designated geological sites
Water	W	Protection, improvement and sustainable management of the water resource	 Ensure that the status of water bodies is protected, maintained and improved in line with the requirements of the Water Framework Directive and Marine Strategy Framework Directive Ensure water resources are sustainably managed to deliver proposed regional and County growth targets in the context of existing and projected water supply and wastewater capacity constraints ensuring the protection of receiving environments Avoid inappropriate zoning and development in areas at risk of flooding and areas that are vulnerable to current and future erosion Integrate sustainable water management solutions (such as SuDS, porous surfacing and green roofs) into development proposals
Material Assets	МА	Sustainable and efficient use of natural resources	 Optimise existing infrastructure and provide new infrastructure to match population distribution proposals in the County – this includes transport infrastructure Ensure access to affordable, reliable, sustainable and modern energy for all which encourages a broad energy generation mix to ensure security of supply – wind, wave solar, tidal, biomass, energy from waste and traditional fossil fuels Promote the circular economy, reduce waste, and increase energy efficiencies Ensure there is adequate sewerage and drainage infrastructure in place to support new development Reduce the energy demand from the transport sector and support moves to electrification of road and rail transport modes Encourage the transition to a zero-carbon economy by facilitating the development of a grid infrastructure to support renewables and international connectivity. Reduce the average energy consumption per capita including promoting energy efficient buildings, retrofitting, smart- buildings, cities and grids
Air	Α	Support clean air policies that reduce the impact of air pollution on the environment and public health	 To avoid, prevent or reduce harmful effects on human health and the environment as a whole resulting from emissions to air from all sectors with particular reference to emissions from transport, residential heating, industry and agriculture Maintain and promote continuing improvement in air quality through the reduction of emissions and promotion of renewable energy and energy efficiency Promote continuing improvement in air quality Reduction of emissions of sulphur dioxide, nitrogen oxides, volatile organic compounds, ammonia and fine particulate matter which are responsible for acidification, eutrophication and ground-level ozone pollution Meet Air Quality Directive standards for the protection of human health — Air Quality Directive Significantly decrease noise pollution and move closer to WHO recommended levels
Climatic Factors	С	Achieving transition to a competitive, low carbon, climate- resilient economy that is cognisant of environmental impacts	 To minimise emissions of greenhouse gasses Integrate sustainable design solutions into infrastructure (e.g. energy efficient buildings; green infrastructure). Contribute towards the reduction of greenhouse gas emissions in line with national targets. Promote development resilient to the effects of climate change Promote the use of renewable energy, energy efficient development and increased use of public transport
Cultural Heritage	СН	Safeguard cultural heritage features and their settings through responsible design and positioning of development	 Protect places, features, buildings and landscapes of cultural, archaeological or architectural heritage
Landscape	L	Protect and enhance the landscape character	 To implement the County Development Plan's framework for identification, assessment, protection, management and planning of landscapes having regard to the European Landscape Convention

Table 7.2 Criteria for appraising the effect of the Alternatives on SEOs

Likely to Improve status of SEOs	Potential Conflict with status of SEOs - likely		No Likely
	to be mitigated	<u>Conflict</u> with	interaction
		status of SEOs -	with status of
		unlikely to be	SEOs
		mitigated	
+	-	-	0

7.3 Detailed Assessment of Alternatives

7.3.1 Effects Common to all Alternatives

Each of the alternatives envisage – in compliance with the robust policy framework in place at national, regional and county level – sustainable development and compact growth in the Plan area. As such, various potential environmental effects are common to each of the alternatives. The environmental effects detailed on would be present, some to varying degrees, under the different alternatives.

Table 7.3 Effects Common to All Alternatives

Environmental	Significant Positive Effect, likely to occur	Potentially Significant Adverse
Component		Environmental Effects, if unmitigated
Biodiversity and Flora and Fauna	Contribution towards protection of ecology (including designated sites, ecological connectivity, habitats) by facilitating development of lands (including those within and adjacent to the Plan area's existing built-up footprint) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the County and beyond.	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 such as birds and bats.
Population and Human Health	 Promotion of economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management. Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands (including those within and adjacent to the Plan area's existing built-up footprint) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere in the County and beyond Contribution towards the protection of human health by facilitating development of lands (including those within and adjacent to the Plan area's existing built-up footprint) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the County and heavend 	Potential adverse effects arising from flood events. Potential interactions if effects arising from environmental vectors.
Soil	Contribution towards the protection of soils by facilitating development of lands (including those within and adjacent to the Plan area's existing built-up footprint) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the County and beyond.	Potential adverse effects on the hydrogeological and ecological function of the soil resource Potential for riverbank erosion
Water	Contribution towards the protection of water by facilitating development of lands (including those within and adjacent to the Plan area's existing built-up footprint) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the County and beyond.	 Potential adverse effects upon the status of water bodies and entries to the WFD Register of Protected Areas (ecological and human value), arising from changes in quality, flow and/or morphology. Increase in flood risk and associated effects associated with flood events.

Environmental	Significant Positive Effect, likely to occur	Potentially Significant Adverse
Component		Environmental Effects, if unmitigated
Material Assets	 Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands (including those within and adjacent to the Plan area's existing built-up footprint) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere in the County and beyond. Contribution towards limits in increases in energy demand from the transport sector by facilitating sustainable compact growth. 	 Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity ensures the mitigation of potential conflicts). Failure to adequately treat surface water runoff that is discharged to water bodies (water services infrastructure and capacity ensures the mitigation of potential conflicts). Failure to comply with drinking water regulations and serve new development with adequate drinking water (water services infrastructure and capacity ensures the mitigation of potential conflicts). Increases in waste levels. Potential impacts upon public assets and infrastructure.
Air and Climatic Factors	Contribution towards climate mitigation and adaptation by facilitating compact development of lands (including those within and adjacent to the Plan area's existing built-up footprint) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere in the County and beyond.	 Potential conflict between development under the Plan and aiming to reduce carbon emissions in line with local, national and European environmental objectives. Potential conflicts between transport emissions, including those from cars, and air quality. Potential conflicts between increased frequency of noise emissions and protection of sensitive receptors. Potential conflicts with climate adaptation measures including those relating to flood risk management.
Cultural Heritage	 Contributes towards protection of cultural heritage elsewhere in the County by facilitating development within and adjacent to the Plan area's existing built-up footprint. 	Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities.
Landscape	Contributes towards protection of wider landscape and landscape designations by facilitating development within and adjacent to the Plan area's existing built-up footprint.	Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape.

7.3.2 Assessment of Plan Boundary/Area Alternatives

Under **Plan Boundary/Area Alternative 1** (covering the area set out in the Dún Laoghaire-Rathdown County Development Plan) less elements integral to achieving the sustainable '10-minute neighbourhood' concept would be available for consideration by the Local Area Plan. The '10-minute neighbourhood' concept is set out under policy objective PHP4 in the County Development Plan 2022-2028, whereby people can access their day-to-day requirements such a shops, employment, open space and schools within a ten-minute journey from their home by bike, foot or public transport.

Plan Boundary/Area Alternative 1 would not, in addition to the area set out in the Dún Laoghaire-Rathdown County Development Plan, include the Dundrum Business Park, lands at Fernbank, the former Notre Dame School site and adjoining open space zoned land to the south. This would make the articulation of the sustainable '10-minute neighbourhood' concept, and associated benefits with respect to sustainable mobility, compact development, emissions and energy use, more difficult.

Under **Plan Boundary/Area Alternative 2** more elements integral to achieving the sustainable '10-minute neighbourhood' concept would be available for consideration by the Local Area Plan.

Plan Boundary/Area Alternative 1 would, in addition to the area set out in the Dún Laoghaire-Rathdown County Development Plan, include the Dundrum Business Park, lands at Fernbank, the former Notre Dame School site and adjoining open space zoned land to the south. This would make the articulation of the sustainable '10-minute neighbourhood' concept, and associated benefits with respect to sustainable mobility, compact development, emissions and energy use, easier. The extension of the Plan boundary allows for a clearer articulation of the ten-minute neighbourhood concept as it increases the range of everyday needs that are available within the Plan lands.

Plan Boundary/Area Alternatives are assessed against Strategic Environmental Objectives on Table 7.4.

Selected Plan Boundary/Area Alternative for the Plan: Alternative 2

Table 7.4 Assessment of Plan Boundary/Area Alternatives against SEOs

Alternative (selected alternative indicated in bold)	Likely to Improve status of SEOs			Potential Conflict with status of SEOs - likely to be mitigated			Probable Conflict with status of SEOs - unlikely to be mitigated	No Likely interaction with status of SEOs
	to a Greater degree	to a Moderate degree	to a Lesser degree	to a Lesser degree	to a Moderate degree	to a Greater degree		
Plan Boundary/ Area Alternative 1	PHH A MA C BFF S W CH L			PHH A C MA BFF S W CH L				
Plan Boundary/ Area Alternative 2	PHH A C MA BFF S W CH L			PHH A C MA BFF S W CH L				

7.3.3 Assessment of Area Based Transport Assessment Alternatives

Informing the Plan with an Area Based Transport Assessment, which focuses on delivering travel solutions that support moving people from the private car to more sustainable modes, (Area Based Transport Assessment Alternative 1) would provide a more coordinated and more orderly provision of transport infrastructure and services, with delivery of projects, and associated benefit with respect to sustainable mobility and compact development, more likely. This approach would be more likely to improve the potential for meeting important objectives relating to emissions and energy use. Potentially adverse impacts on environmental components including ecology and water would need to be adequately mitigated at project level.

Not informing the Plan with an Area Based Transport Assessment, which focuses on delivering travel solutions that support moving people from the private car to more sustainable modes, (Area Based Transport Assessment Alternative 2) would provide a less coordinated and less orderly provision of transport infrastructure and services, with delivery of projects, and associated benefit with respect to sustainable mobility and compact development, less likely. This approach would be less likely to improve the potential for meeting important objectives relating to emissions and energy use. Potentially adverse impacts arising from more coherently planned transport developments on environmental components, including ecology and water, could be mitigated at both LAP and project level.

Area Based Transport Assessment Alternatives are assessed against Strategic Environmental Objectives on Table 7.5.

Selected Area Based Transport Assessment Alternative for the Plan: Alternative 1

Table 7.5 Assessment of Area Based Transport Assessment Alternatives against SEOs

Alternative (selected alternative indicated in bold)	Likely to Impr	rove status of SE	Os	Potential Conflict with status of SEOs - likely to be mitigated			Probable Conflict with status of SEOs - unlikely to be mitigated	No Likely interaction with status of SEOs
	to a Greater degree	to a Moderate degree	to a Lesser degree	to a Lesser degree	to a Moderate degree	to a Greater degree		
Ecosystem Services Approach Alternative 1	PHH A C MA BFF S W CH L			PHH A C MA BFF S W CH L				
Ecosystem Services Approach Alternative 2			PHH A MA C BFF S W CH L			PHH A C MA BFF S W CH L		

7.3.4 Assessment of Ecosystem Services Approach Alternatives

Ecosystem Services Approach Alternative 1 would integrate a strategy throughout the Plan for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way. Principles that would be integrated throughout the Plan, in a coordinated and comprehensive manner, would include:

- Consideration of natural systems by using knowledge of interactions in nature and how ecosystems function
- Taking into account of the services that ecosystems provide including those that underpin social and economic well-being, such as flood and climate regulation or recreation, culture and quality of life
- Involving people those who benefit from the ecosystem services and those managing them need to be involved in decisions that affect them.

This would mean that there would be:

- An increased likelihood in the extent, magnitude and frequency of positive effects occurring
 with regard to natural capital and ecosystem service issues, such as the management of air
 quality, noise pollution, light pollution, pollination, flood risk, water bodies and river basins and
 natural resources supporting energy production and recreation; and
- A decreased likelihood in the extent, magnitude and frequency of adverse effects on natural capital and ecosystem services.

Ecosystem Services Approach Alternative 2 would not integrate a strategy throughout the Plan for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way.

As has been the case over previous plan periods, many natural capital and ecosystem service issues would be integrated into individual Plan Policy Objectives and into decision making at lower tiers of plan preparation and development management. However, this approach would be less coordinated and comprehensive than would be the case under an Ecosystems Services Approach.

This would mean that there would be:

- A decreased likelihood in the extent, magnitude and frequency of positive effects occurring with regard to natural capital and ecosystem service issues; and
- An increased likelihood in the extent, magnitude and frequency of adverse effects on natural capital and ecosystem services.

Ecosystem Services Approach Alternatives are assessed against Strategic Environmental Objectives on Table 7.6.

Selected Ecosystem Services Approach Alternative for the Plan: Alternative 1

Table 7.6 Assessment of Ecosystem Services Approach Alternatives against SEOs

Alternative (selected alternative indicated in bold)	Likely to Improve status of SEOs			Potential Conflict with status of SEOs - likely to be mitigated			Probable Conflict with status of SEOs - unlikely to be mitigated	No Likely interaction with status of SEOs
	to a Greater degree	to a Moderate degree	to a Lesser degree	to a Lesser degree	to a Moderate degree	to a Greater degree		
Ecosystem Services Approach Alternative 1	BFF PHH S W MA A C CH L			BFF PHH S W MA A C CH L				
Ecosystem Services Approach Alternative 2			BFF PHH S W MA A C CH L			BFF PHH S W MA A C CH L		

7.3.5 Assessment of Built Heritage Alternatives

A Plan that adds detailed, local-level provisions to the existing planning framework relating to the conservation of built heritage (**Built Heritage Alternative 1**) would further contribute the protection of existing heritage that is already contributed towards by the existing planning framework. By integrating heritage considerations into the Plan, Alternative 1 would be most likely to ensure that new development respects the historic grain of the built environment and archaeology that currently exists.

A Plan that does not add detailed, local-level provisions to the existing planning framework relating to the conservation of built heritage, relying solely on existing provisions, including those included as part of the County Development Plan (**Built Heritage Alternative 2**) would not further contribute the protection of existing heritage that is already contributed towards by the existing planning framework. By not integrating heritage considerations into the Plan, Alternative 2 would be least likely to ensure that new development respects the historic grain of the built environment and archaeology that currently exists.

Built Heritage Alternatives are assessed against Strategic Environmental Objectives on Table 7.7.

Selected Built Heritage Alternative for the Plan: Alternative 1

Table 7.7 Assessment of Built Heritage Alternatives against SEOs

Alternative (selected alternative indicated in bold)	Likely to <u>Improve</u> status of SEOs			Potential Conflict with status of SEOs - likely to be mitigated			Probable Conflict with status of SEOs - unlikely to be mitigated	No Likely interaction with status of SEOs
	+			_			-	U
	degree a	to a Moderate degree	to a Lesser degree	to a Lesser degree	to a Moderate degree	to a Greater degree		
Built Heritage Alternative 1	MA CH L	BFF PHH S W A C		MA CH L	BFF PHH S W A C			
Built Heritage Alternative 2		BFF PHH S W A C	MA CH L		BFF PHH S W A C	MA CH L		

7.3.6 Assessment of Approach to Site Development Frameworks Alternatives

A Local Area Plan for Dundrum, including Key Development Sites, would help to direct incompatible development away from the most sensitive areas in the County and beyond and to focus on directing compact, sustainable development within and adjacent to the existing built-up footprint of Dundrum. Development of areas within and adjacent to the existing built-up footprint of Dundrum, which is generally more robust, better serviced and better connected than other lands elsewhere in the County and beyond, would contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development would be accompanied by placemaking initiatives to enable Dundrum to become a more desirable place to live – so it can sustainably accommodate new residents and maintain and improve services to existing and future communities.

Not including Site Development Frameworks that would provide location specific guidance for future planning applications at Key Development Sites (**Approach to Site Development Frameworks Alternative 1**) would reduce the likelihood of sustainable development. Development would be market-led and would seek to comply with relevant planning provisions in the absence of additional guidance. The sustainable development of the Plan area would be less likely than under Alternative 2.

By including Site Development Frameworks that would provide location specific guidance while, at the same time, allowing for flexibility in final design, layout and uses, for future planning applications at Key Development Sites, **Alternative 2** would increase the likelihood of sustainable development.

Including Site Development Frameworks that would outline criteria (which would not allow for flexibility in final design, layout and uses) for future planning applications at Key Development Sites (**Approach to Site Development Frameworks Alternative 3**) would increase the potential to hinder compliance with rigid criteria in the longer term, in a context of evolving market needs and planning requirements.

Approach to Site Development Frameworks Alternatives are assessed against Strategic Environmental Objectives on Table 7.8.

Selected Approach to Site Development Frameworks Alternative for the Plan: Alternative 2

Table 7.8 Assessment of Approach to Site Development Frameworks Alternatives against SEOs

(selected alternative indicated in bold)	Likely to <u>Improve</u> status of SEOs			Potential Conflict with status of SEOs - likely to be mitigated			Probable Conflict with status of SEOs - unlikely to be mitigated	No Likely interaction with status of SEOs
	to a Greater degree	to a Moderate degree	to a Lesser degree	to a Lesser degree	to a Moderate degree	to a Greater degree		
Approach to Site Development Frameworks Alternative 1			PHH A MA C BFF S W CH L			PHH A C MA BFF S W CH L		
Approach to Site Development Frameworks Alternative 2	PHH A C MA BFF S W CH L			PHH A C MA BFF S W CH L				
Approach to Site Development Frameworks Alternative 3			PHH A MA C BFF S W CH L			PHH A C MA BFF S W CH L		

7.3.7 Assessment of Densities Alternatives

The Application of a single standard density across the whole Plan area in order to calculate the potential residential yield relating to land zoned for residential purposes for the Core Strategy (**Density Alternative 1**) could lead to the potential over or undersupply of land for primarily residential purposes. The application of a singular low net residential density could fundamentally undermine the efficient use of land, compact growth and the transition towards a low carbon and more climate resilient society. This would have the potential to push new development towards more environmentally sensitive lands outside of the Plan area that are less well-serviced and less well-connected, resulting in unnecessary potentially significant adverse effects on all environmental components. The application of a singular high net residential density could result in a potential mis-alignment between the supply of zoned land to meet the projected demand for new housing. This could result in a misalignment between new development and essential services provision with associated potential for adverse effects on environmental components.

The Application of different densities at different locations, as appropriate, (**Density Alternative 2**) would provide for the most sustainable Core Strategy, which would contribute towards environmental protection and management the most. Higher densities would be provided where sustainable transport mode opportunities are available and lower densities would be provided where constraints are presented by, for example, cultural heritage designations or the local road network. This approach would contribute towards the efficient use of land, compact growth and the transition towards a low carbon and more climate resilient society. Alternative 2 would help to ensure compact, sustainable development within and adjacent to the existing built-up footprint and would conflict with the protection and management of environmental components the least. Alignment between new development and essential services provision would be most likely under Alternative 2.

Density Alternatives are assessed against Strategic Environmental Objectives on Table 7.9.

Selected Density Alternative for the Plan: Alternative 2

Table 7.9 Assessment of Density Alternatives against Strategic Environmental Objectives

Alternative (selected alternative indicated in bold)	Likely to <u>Improve</u> status of SEOs			Potential Conflict with status of SEOs - likely to be mitigated			Probable Conflict with status of SEOs - unlikely to be mitigated	No Likely interaction with status of SEOs
		+			-		-	U
	to a Greater degree	to a Moderate degree	to a Lesser degree	to a Lesser degree	to a Moderate degree	degree a		
Density Alternative 1			BFF PHH S W MA A C CH L			BFF PHH S W MA A C CH L		
Density Alternative 2	BFF PHH S W MA A C CH L			BFF PHH S W MA A C CH L				

7.3.8 Assessment of Transport Infrastructure Alternatives

Under **Transport Infrastructure Alternative 1**, new transport infrastructure would be considered subject to environmental constraints, including those related to habitats and potential impacts (e.g. disturbance from lighting). This would include minimising river crossings, avoiding sensitive habitats, not increasing barriers to flood waters and sustainable design and construction techniques. By focusing on mitigation at both plan and project levels, Alternative 1 would offer the most certainty for environmental protection and management and would be more likely to result in important individual projects (relating to sustainable mobility and emissions/energy objectives) receiving permission.

Under **Transport Infrastructure Alternative 2**, all additional environmental mitigation would be left to be defined in the future, at project level. This would offer the least certainty for environmental protection and management and would be more likely to result in important individual projects (relating to sustainable mobility and emissions objectives) not been given permission.

Transport Infrastructure Alternatives are assessed against Strategic Environmental Objectives on Table 7.10.

Selected Transport Infrastructure Alternative for the Plan: Alternative 1

Table 7.10 Assessment of Transport Infrastructure Alternatives against SEOs

(selected alternative indicated in bold)	Likely to Improve status of SEOs			Potential (Conflict with state mitigated	Probable Conflict with status of SEOs - unlikely to be mitigated	No Likely interaction with status of SEOs	
	to a Greater degree	to a Moderate degree	to a Lesser degree	to a Lesser degree	to a Moderate degree	to a Greater degree		
Transport Infrastructure Alternative 1	BFF PHH S W MA A C CH L			BFF PHH S W MA A C CH L				
Transport Infrastructure Alternative 2			BFF PHH S W MA A C CH L			BFF PHH S W MA A C CH L		

7.4 Selected Alternatives

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

These alternatives have been adopted by the Members having regard to both:

- 1. The environmental effects which were identified by the SEA and are detailed above; and
- 2. Planning including social and economic effects that also were considered by the Members.

Section 8 Evaluation of Plan Provisions

8.1 Introduction

This section provides an assessment of environmental effects using the information on the current state of the environment (provided in Section 4) and the Strategic Environmental Objectives (see Table 8.1) from implementation of the Plan.

The Plan provisions (and, in Section 7, the alternatives) are evaluated using compatibility criteria (see Table 8.2 below) in order to determine how they would be likely to affect the status of the existing environment and the SEOs. The SEOs and the Plan provisions (and, in Section 7, the alternatives) are arrayed against each other in order to demonstrate which interactions would cause effects on specific components of the environment. Where the appraisal identifies an interaction with the status of an SEO the relevant SEO code is entered into the relevant column.

The interactions identified are reflective of likely significant environmental effects:

- Interactions that would be *likely to improve the status* of a particular SEO would be likely to contribute towards a significant positive effect on the environmental component to which the SEO relates, including in-combination with the existing statutory planning/decision-making and consent-granting framework.
- Interactions that would *potentially conflict with the status* of *an SEO and would be likely to be mitigated* would be likely to result in potential significant negative effects; however, these effects will be mitigated by measures which have been integrated into the Plan, or associated County Development Plan, and residual effects would not be significant (see Table 8.3 of this report).
- Interactions that would probably *conflict with the status of an SEO and would be unlikely to be mitigated* would be likely to result in a significant residual negative effect on the environmental component to which the SEO relates.

Effects considered include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects.

The degree of significance of effects occurring cannot be fully determined at this level of decision making due to the lack of exact detail available with regard to the type or scale of development that will be permitted under the Plan. However, a strategic assessment can be undertaken.

Table 8.1 Strategic Environmental Objectives⁶²

Environmental	SEO	Guiding	Strategic Environmental Objectives
Component	Code	Principle	
Biodiversity, Flora and Fauna	BFF	No net contribution to biodiversity losses or deterioration	 To preserve, protect, maintain and, where appropriate, enhance the terrestrial, aquatic and soil biodiversity, particularly EU designated sites and protected species Ensure no adverse effects on the integrity of any European site, with regard to its qualifying interests, associated conservation status, structure and function Safeguard national, regional and local designated sites and supporting features which function as stepping stones for migration, dispersal and genetic exchange of wild species Enhance biodiversity in line with the National Biodiversity Strategy and its targets To protect, maintain and conserve natural capital
Population and Human Health	РНН	Improve quality of life for all ages and abilities based on high-quality, serviced, well connected and sustainable residential, working,	 Promote economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management Ensure that existing population and planned growth is matched with the required public infrastructure and the required services Safeguard citizens from environment-related pressures and risks to health and well-being

⁶² See also Section 5

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives
Component	Code	educational and recreational environments	
Soil (and Land)	S	Ensure the long- term sustainable management of land	 Protect soils against pollution, and prevent degradation of the soil resource Promote the sustainable use of infill and brownfield sites over the use of greenfield sites Safeguard designated geological sites
Water	W	Protection, improvement and sustainable management of the water resource	 Ensure that the status of water bodies is protected, maintained and improved in line with the requirements of the Water Framework Directive and Marine Strategy Framework Directive Ensure water resources are sustainably managed to deliver proposed regional and County growth targets in the context of existing and projected water supply and wastewater capacity constraints ensuring the protection of receiving environments Avoid inappropriate zoning and development in areas at risk of flooding and areas that are vulnerable to current and future erosion Integrate sustainable water management solutions (such as SuDS, porous surfacing and green roofs) into development proposals
Material Assets	МА	Sustainable and efficient use of natural resources	 Optimise existing infrastructure and provide new infrastructure to match population distribution proposals in the County – this includes transport infrastructure Ensure access to affordable, reliable, sustainable and modern energy for all which encourages a broad energy generation mix to ensure security of supply – wind, wave solar, tidal, biomass, energy from waste and traditional fossil fuels Promote the circular economy, reduce waste, and increase energy efficiencies Ensure there is adequate sewerage and drainage infrastructure in place to support new development Reduce the energy demand from the transport sector and support moves to electrification of road and rail transport modes Encourage the transition to a zero-carbon economy by facilitating the development of a grid infrastructure to support renewables and international connectivity. Reduce the average energy consumption per capita including promoting energy efficient buildings, retrofitting, smart- buildings, cities and grids
Air	A	Support clean air policies that reduce the impact of air pollution on the environment and public health	 To avoid, prevent or reduce harmful effects on human health and the environment as a whole resulting from emissions to air from all sectors with particular reference to emissions from transport, residential heating, industry and agriculture Maintain and promote continuing improvement in air quality through the reduction of emissions and promotion of renewable energy and energy efficiency Promote continuing improvement in air quality Reduction of emissions of sulphur dioxide, nitrogen oxides, volatile organic compounds, ammonia and fine particulate matter which are responsible for acidification, eutrophication and ground-level ozone pollution Meet Air Quality Directive standards for the protection of human health — Air Quality Directive
Climatic Factors	С	Achieving transition to a competitive, low carbon, climateresilient economy that is cognisant of environmental impacts	 Significantly decrease noise pollution and move closer to WHO recommended levels To minimise emissions of greenhouse gasses Integrate sustainable design solutions into infrastructure (e.g. energy efficient buildings; green infrastructure). Contribute towards the reduction of greenhouse gas emissions in line with national targets. Promote development resilient to the effects of climate change Promote the use of renewable energy, energy efficient development and increased use of public transport
Cultural Heritage	СН	Safeguard cultural heritage features and their settings through responsible design and positioning of development	Protect places, features, buildings and landscapes of cultural, archaeological or architectural heritage
Landscape	L	Protect and enhance the landscape character	To implement the County Development Plan's framework for identification, assessment, protection, management and planning of landscapes having regard to the European Landscape Convention

Table 8.2 Criteria for appraising the effect of the Plan provisions on SEOs

Likely to <u>Improve</u> status of SEOs	Potential <u>Conflict</u> with status of SEOs - likely to be mitigated	Conflict with status of SEOs - unlikely to be	No Likely interaction with status of SEOs
+	-	mitigated -	0

8.2 Cumulative Effects⁶³

Cumulative effects are one of the types of effects which have been considered by the assessment of the alternatives. Cumulative effects can be described as the addition of many small impacts to create one larger, more significant, impact.

There are two types of potential cumulative effects that have been considered, namely:

- Potential intra-Plan cumulative effects these arise from the interactions between different types of potential environmental effects resulting from a plan, programme, etc. Where there are elevated levels of environmental sensitivities (such as those identified under Section 4), future development could result in environmental conflicts and lead to a deterioration in environmental integrity. The interrelationships between environmental components that help determine these potential effects are identified on Table 8.4 e.g. interrelationships between: human health and water quality; human health and air quality; human health and flood risk; and ecology and water quality.
- Potential *inter-Plan* cumulative effects these arise when the effects of the implementation of one plan occur in combination with those of other plans, programmes, developments, etc.

Effects that may arise as a result of implementing the Plan have been mitigated to the extent that the only residual adverse effects likely to occur as a result of implementation of the Plan are those which are identified under Table 8.3.

Other policies, plans and programmes that have been considered by the assessment of effects include those which are detailed under Section 2.4 (and associated Appendix I "Relationship with Legislation, Plans and Programmes"), Section 4 and Section 5. Plans and programmes from various sectors will interact with the Plan, including those relating to land use planning. These plans and programmes are subject to their own environmental assessment requirements as relevant. Examples include:

- Land use policy, plans and programmes (e.g. the National Planning Framework, the Eastern and Midland Regional Spatial and Economic Strategy, the Dún Laoghaire-Rathdown County Development Plan 2022-2028, adjoining Development Plans and Local Area Plans);
- Dún Laoghaire-Rathdown Local Economic and Community Plan and the Local Economic and Community Plans of adjoining counties;
- Energy policy, plans and programmes (e.g. Grid25 and associated Implementation Programme, Ireland's National Renewable Energy Action Plan 2010, Strategy for Renewable Energy 2012-2020, Offshore Renewable Energy Development Plan, Draft National Energy and Climate Plan 2021-2030 and the Renewable Electricity Policy and Development Framework);
- Climate related policy, plans and programmes (e.g. the National Climate Policy Position and Climate Action 2014, Climate Action and Low Carbon Development Act 2015, as amended, Climate Action Plan 2023, National Mitigation Plan 2017, the National Adaptation Framework 2018 and the Dún Laoghaire-Rathdown Climate Change Adaptation Strategy 2019-2024);
- Water services, waste management, transport and energy infrastructure plans (e.g. Uisce Éireann's Water Services Strategic Plan and associated Capital Investment Plan, Eastern and Midland Regional Waste Management Plan and Transport Strategy for the Greater Dublin Area); and
- Environmental protection and management plans (e.g. River Basin Management Plans and Flood Risk Management Plans).

Potential cumulative/in combination effects include:

• Contributions towards reductions in travel related greenhouse gas and other emissions to air, reductions in consumption from non-renewables and associated achievement of legally binding targets (in combination with plans and programmes from all sectors, including energy, transport and land use planning) as a result of facilitating:

⁶³ The EPA's guidance note 'Good Practice Guidance note on cumulative effects assessment in SEA' has been considered in the assessment.

- sustainable compact growth;
- o sustainable mobility/a shift from motorised transport modes to more sustainable and non-motorised transport modes; and
- renewable energy development.
- Contributions towards travel related greenhouse gas and other emissions to air (in combination with plans and programmes from all sectors, including transport and land use planning) as a result of facilitating development which must be accompanied by road capacity;
- Facilitation of new development that is accompanied by appropriate levels of water services thereby contributing towards environmental protection;
- Need for and use of water and waste water treatment capacity arising from new developments and associated potential adverse effects;
- Potential cumulative effects upon surface and ground water status as a result of, for example, housing, employment and agricultural development – loadings and abstractions;
- Potential cumulative effects (habitat damage, enhancing ecological connectivity, contributing towards sustainable mobility) arising from linear developments, such as those relating to green infrastructure, including beyond the Plan boundary;
- Potential cumulative effects on flood risk by, for example, development of greenfield lands or obstruction of flood paths; and
- In combination with plans and programmes from all sectors potential adverse effects on all environmental components arising from all development in greenfield and brownfield areas (e.g. infrastructural, residential, economic, agricultural etc.). The type of these effects are consistent with those described on Table 8.3. These plans and programmes are required to comply with environmental legislation and undergo SEA and AA as relevant comply with environmental legislation while projects are subject to EIA and AA, as relevant.

These effects would have the potential, if unmitigated, if they occurred, to result in changes in the environment within and beyond the Plan area.

A variety of the issues covered by the Plan provisions are regional and county issues which are considered: at Regional Assembly level, in the Eastern and Midland RSES and by planning authorities across the Region; and at County level, including through the Dún Laoghaire-Rathdown County Development Plan 2022-2028. The solutions to these issues are often regional solutions which are subject their own consenting procedures. Works arising outside of the Plan area as a result of providing for new development within the Plan area, including works arising as a result of the cumulative provision of development in the wider County and wider Eastern and Midland Region, would potentially conflict with a number of environmental components, across the wider County and wider Eastern and Midland Region and beyond, including: ecology, soil function, the status of water bodies and the landscape. Some of these conflicts would be mitigated by measures which will be integrated into the Plan while some will be mitigated by measures arising out of separate consent procedures.

8.3 Overall Evaluation

Dún Laoghaire-Rathdown County Council have integrated various recommendations arising from the SEA process into the Plan (see Section 9). Table 8.3 provides a detailed overall evaluation of the environmental effects arising from the Plan. The effects encompass all in-combination/cumulative effects arising from implementation of the Plan. The potentially significant adverse environmental effects (if unmitigated) arising from implementation of the Plan are detailed as are residual effects, taking into account mitigation integrated into both the Plan and the Dún Laoghaire-Rathdown County Development Plan 2022-2028 – see Section 9.

Environmental impacts which occur will be determined by the nature and extent of multiple or individual projects and site-specific environmental factors. Strategic Environmental Objective (SEO) codes are taken from Table 8.1.

SEA Environmental Report for the Dundrum Local Area Plan 2023 **Table 8.3 Overall Evaluation – Effects arising from the Plan**

Environmental Component	Environmental Effects, in combination with the wider planning framework Effects include in-combination effects that are planned for through the wider planning framework including the NPF and associated NDP 2018, the Eastern and Midland RSES, the Dún Laoghaire-Rathdown County Development 2022-2028 Plan and adjacent Development Plans and lower-tier land use plans						
	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non- Significant Effects				
Biodiversity and Flora and Fauna	 Contribution towards protection of ecology (including designated sites, ecological connectivity, habitats) by facilitating development of lands (including those within and adjacent to the Plan area's existing built-up footprint) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the County and beyond. Contribution towards the maintenance of existing green infrastructure and associated ecosystem services, listed species, ecological connectivity and non-designated habitats. Contribution towards protection and/or maintenance of biodiversity and flora and fauna by contributing towards the protection of natural capital including the environmental vectors of air, water and soil. Biodiversity and flora and fauna includes biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species (including birds and bats), listed/protected species, ecological connectivity and non-designated habitats (including terrestrial and aquatic habitats), and disturbance to biodiversity and flora and fauna – including terrestrial and aquatic biodiversity and flora and fauna. 	 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 such as birds and bats. 	 Loss of an extent of non-protected habitats and species arising from the replacement of semi-natural land covers with artificial surfaces. Losses or damage to ecology (these would be in compliance with relevant legislation). 	BFF			
Population and Human Health	 Promotion of economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management. Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands (including those within and adjacent to the Plan area's existing built-up footprint) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere in the County and beyond Contribution towards the protection of human health by facilitating development of lands (including those within and adjacent to the Plan area's existing built-up footprint) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the County and beyond. Contributes towards protection of human health as a result of contributing towards the protection of natural capital including environmental vectors, including air and water. 	 Potential adverse effects arising from flood events. Potential interactions if effects arising from environmental vectors. 	Potential interactions with residual effects on environmental vectors – please refer to residual adverse effects under "Soil", "Water" and "Air and Climatic Factors" below.	PHH			

Environmental		in combination with the wider planning framework		SEO			
Component	Environmental Effects, in combination with the wider planning framework Effects include in-combination effects that are planned for through the wider planning framework including the NPF and associated NDP 2018, the Eastern and Midland RSES, the Dún Laoghaire-Rathdown County Development 2022-2028 Plan and adjacent Development Plans and lower-tier land use plans						
	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmittigated	Likely Residual Adverse Non- Significant Effects				
Soil	Contribution towards the protection of soils by facilitating development of lands (including those within and adjacent to the Plan area's existing built-up footprint) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the County and beyond.	 Potential adverse effects on the hydrogeological and ecological function of the soil resource. Potential for riverbank erosion. 	 Loss of an extent of soil function arising from the replacement of semi-natural land covers with artificial surfaces. Riverbank erosion will continue to occur naturally over time and is likely to be enhanced by climate change 	S			
Water	 Contribution towards the protection of water by facilitating development of lands (including those within and adjacent to the Plan area's existing built-up footprint) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the County and beyond. Contributions towards the protection of water resources including the status of surface and groundwaters and water-based designations. Contribution towards flood risk management and appropriate drainage. 	 Potential adverse effects upon the status of water bodies and entries to the WFD Register of Protected Areas (ecological and human value), arising from changes in quality, flow and/or morphology. Increase in flood risk and associated effects associated with flood events. 	 Any increased loadings as a result of development to comply with the River Basin Management Plan. Flood related risks remain due to uncertainty with regard to extreme weather events – however such risks will be mitigated by measures that have been integrated into the Plan. 	W			
Material Assets	 Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands (including those within and adjacent to the Plan area's existing built-up footprint) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere in the County and beyond. Contribution towards compliance with national and regional water services and waste management policies. Contribution towards increase in renewable energy use by facilitating renewable energy and electricity transmission infrastructure developments. Contribution towards limits in increases in energy demand from the transport sector by facilitating sustainable compact growth. Contribution towards reductions in average energy consumption per capita including promoting energy efficient buildings, retrofitting, smart buildings, cities and grids. 	 Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity ensures the mitigation of potential conflicts). Failure to adequately treat surface water run-off that is discharged to water bodies (water services infrastructure and capacity ensures the mitigation of potential conflicts). Failure to comply with drinking water regulations and serve new development with adequate drinking water (water services infrastructure and capacity ensures the mitigation of potential conflicts). Increases in waste levels. Potential impacts upon public assets and infrastructure. 	 Exceedance of capacity in critical infrastructure risks remain, including due to uncertainty with regard to climate – however, such risks will be mitigated by: measures, including those requiring the timely provision of critical infrastructure, and compliance with the Water Framework Directive and associated River Basin Management Plan. Residual wastes to be disposed of in line with higher-level waste management policies. Any impacts upon public assets and infrastructure to comply with statutory planning/consent-granting framework. 	MA			

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Environmental Component	Effects include in-combination effects that are planned for through the wider planning framework including the NPF and associated NDP 2018, the Eastern and Midland RSES, the Dún Laoghaire-Rathdown County Development 2022-2028 Plan and adjacent Development Plans and lower-tier land use plans					
	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non- Significant Effects			
Air and Climatic Factors	 Contribution towards climate mitigation and adaptation by facilitating compact development of lands (including those within and adjacent to the Plan area's existing built-up footprint) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere in the County and beyond. In combination with other plans, programmes etc., contribution towards the objectives of the wide policy framework relating to climate mitigation and adaptation, and associated contribution towards maintaining and improving air quality and managing noise levels, including through measures relating to: Sustainable compact growth; Sustainable mobility, including walking, cycling and public transport; Drainage, flood risk management and resilience; Sectors including agriculture, residential heating and infrastructure; Sustainable infrastructure design solutions including energy efficient buildings and green infrastructure. 	 Potential conflict between development under the Plan and aiming to reduce carbon emissions in line with local, national and European environmental objectives. Potential conflicts between transport emissions, including those from cars, and air quality. Potential conflicts between increased frequency of noise emissions and protection of sensitive receptors. Potential conflicts with climate adaptation measures including those relating to flood risk management. 	 An extent of travel related greenhouse gas and other emissions to air. This has been mitigated by provisions which have been integrated into the Plan, including those relating to sustainable compact growth and sustainable mobility. Interactions between noise emissions and sensitive receptors. Various provisions have been integrated into the Plan to ensure that noise levels at sensitive receptors will be minimised. 	AC		
Cultural Heritage	 Contributes towards protection of cultural heritage elsewhere in the County by facilitating development within and adjacent to the Plan area's existing built-up footprint. Contributes towards protection of cultural heritage within and adjacent to the Plan area's existing built-up footprint by facilitating brownfield development and regeneration. 	 Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities. 	 Potential effects on known architectural and archaeological heritage and unknown archaeology however, these will occur in compliance with legislation. 	СН		
Landscape	Contributes towards protection of wider landscape and landscape designations by facilitating development within and adjacent to the Plan area's existing built-up footprint.	Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape.	Landscapes will change overtime as a result of natural changes in vegetation cover combined with new developments that will occur in compliance with the Plan's landscape protection measures.	L		

8.4 Appropriate Assessment and Strategic Flood Risk Assessment

Appropriate Assessment (AA) Screening and Stage 2 AA are being undertaken alongside the preparation of the Plan. The requirement for AA is provided under the EU Habitats Directive (Directive 1992/43/EEC). As part of the AA Screening process, the Council determined that it could not be excluded, on the basis of objective information, that the emerging Draft Plan, individually, or in combination with other plans and projects would have a likely adverse effect on the integrity of a European Site. Therefore, Stage 2 AA was required. The conclusion of the Stage 2 AA is that, following the application of mitigation, the Plan will not affect the integrity of the European Sites, alone or in combination with other plans or projects.⁶⁴

A Strategic Flood Risk Assessment (SFRA) document accompanies this SEA Environmental Report and the Plan. Requirements in relation to SFRA are provided under 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (Department of Environment and Office of Public Works, 2009) and associated Department of the Environment, Community and Local Government Circular PL2/2014. Flood risk management and drainage provisions are already in force through the County Development Plan and related provisions have been integrated into the LAP.

Various policies and objectives have been integrated into the Plan through the SEA, SFRA and AA processes.

8.5 Interactions with Climate Mitigation and Adaptation

As detailed in the Local Area Plan, the creation of a climate resilient County is an overarching strategic outcome of the Dún Laoghaire-Rathdown County Development Plan 2022-2028. Given the ever-increasing challenge of and need to urgently address climate change, climate action is also a central theme of the Local Area Plan. The Dún Laoghaire-Rathdown Climate Change Action Plan 2019-2024 addresses both adaptation and mitigation across five themes as follows: Energy and Building; Transport; Flood resilience; Nature Based solutions; and Resource management.

The Local Area Plan has been prepared with the purpose of integrating and implementing the policies and provisions of the County Development Plan and the Climate Change Action Plan where relevant.

Climate change mitigation objectives are integral to the overarching objectives and principles of the Local Area Plan, including, inter alia, the concept of ten-minute neighbourhoods, proximity to high quality public transport, public transport improvements, accessible employment and sustainable neighbourhood infrastructure, compact growth, energy efficiency in new buildings and urban greening of the area. Adaptation measures, including those relating to sustainable water management and flood risk, have also been integrated into the Local Area Plan (see Section 8.7.5 below).

(c) adequate compensatory measures in place.

⁶⁴ 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

8.6 Interrelationship between Environmental Components

The SEA Directive requires the Environmental Report to include information on the likely significant effects on the environment, including on issues such as biodiversity, fauna, flora, population, human health, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors.

Likely significant effects on environmental components which are identified include those which are interrelated; implementation of the Plan will not affect the interrelationships between these components. The presence of significant interrelationships between environmental components is identified on Table 8.4.

Table 8.4 Presence of Interrelationships between Environmental Components

Component	Biodiversity, flora and fauna	Population and human health	Soil	Water	Air and Climatic factors	Material assets	Cultural heritage	Landscape
Biodiversity, flora and fauna		Yes	Yes	Yes	Yes	Yes	No	Yes
Population and Human Health			Yes	Yes	Yes	Yes	No	No
Soil				Yes	No	Yes	No	No
Water					No	Yes	No	No
Air and Climatic Factors						Yes	No	No
Material Assets							Yes	Yes
Cultural Heritage								Yes
Landscape								

8.7 Detailed Evaluation

For an explanation of SEO codes e.g. BFF, PHH, S, W, etc. refer to Table 8.1 on page 66.

The following applies to each of the sub-sections 8.7.1 to 8.7.8.

The Plan is situated in a hierarchy of documents setting out public policy setting out public policy for, among other things, land use planning, infrastructure, sustainable development, tourism, environmental protection and environmental management, such as the National Planning Framework, the National Development Plan, the National Mitigation Plan, the National Adaptation Framework, the Climate Action Plan, the Regional Spatial and Economic Strategy for the Eastern and Midland Region and the Dún Laoghaire-Rathdown County Development Plan 2022-2028 (for additional detail please refer to Section 2.4 "Relationship with other relevant Plans and Programmes" in this report).

These other existing policies, plans etc. have been subject to their own environmental assessment processes, as relevant, and already provide for various measures that have been compiled into the Plan. The Plan aligns with these documents and will be incorporated into the review and preparation of these documents.

Lower tier plans and projects must be consistent and comply with the provisions of the Plan and of these other policies, plans etc. and will be subject to their own project level EIA and AA requirements as relevant. An assessment of cumulative effects is provided at Section 8.2 of this report.

8.7.1 Chapter 1: Introduction, Context and Analysis

	Likely to	Potential Conflict	Probable	No Likely
	<u>Improve</u>	with status of	<u>Conflict</u>	interaction
	status of	SEOs - likely to be	with	with
	SEOs	mitigated	status of	status of
			SEOs -	SEOs
			unlikely	
			to be	
			mitigated	
	+	-	-	0
Summary	BFF PHH			
	S W MA	MA A C CH L		
This chapter sets out the vision for the Plan, the legal framework underpinning Local Area Plans, the various studies and assessments that have informed	A C CH L			
the Plan, the Plan context and the future population for the Plan area.				
An analysis sets out the Strengths, Weaknesses, Opportunities and Challenges of the area.				

Commentary

The assessment of the Plan's Vision against Strategic Environmental Objectives (SEOs BFF, PHH, S, W, MA, A, C, CH and L) is consistent with the:

- Environmental effects detailed under subsections 8.2 to 8.7 of this report; and
- Assessments of the selected alternatives for the Plan provided at Section 7 of this report.

Implementing the Plan will help to direct incompatible development away from the most sensitive areas in the County and beyond and to focus on directing compact, sustainable development within and adjacent to the existing built-up footprint of Dundrum. Development of areas within and adjacent to the existing built-up footprint of Dundrum, which is generally more robust, better serviced and better connected than other lands elsewhere in the County and beyond, will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development will be accompanied by placemaking initiatives to enable the Plan area to become a more desirable place to live – so it can sustainably accommodate new residents and maintain and improve services to existing and future communities. Compatible sustainable development in more sensitive locations within the Plan area is also provided for, subject to various requirements relating to environmental protection and management being met.

The Vision would contribute towards the Statutory consent granting and decision-making framework for land use developments and activities and sustainable development of the Plan area, in combination with other Plan provisions and other plans, programmes, strategies, etc. Potential adverse environmental effects arising from land use development and activities include in-combination effects arising from services and infrastructure to service development, for example those relating to water services, transport and energy.

The SEA process that is being undertaken alongside the preparation of the Plan has brought about various changes to the emerging Plan through an iterative process. Some of these measures are reproduced under Section 9 "Mitigation Measures" of this report – alongside existing measures from the County Development Plan. By integrating SEA recommendations into the Plan, Dún Laoghaire-Rathdown County Council is helping to ensure that:

- The potential significant adverse effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are avoided, reduced or offset: and
- The beneficial environmental effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are maximised.

The Plan's Vision will contribute towards the sustainable development of the Plan area and the protection and management of the environment.

8.7.2 Chapter 2: Urban Framework and Site Development Frameworks

	Likely to	Potential Conflict	Probable	No Likely
	<u>Improve</u>	with status of	<u>Conflict</u>	interaction
	status of	SEOs - likely to be	with	with
	SEOs	mitigated	status of	status of
			SEOs -	SEOs
			unlikely	
			to be	
			mitigated	
	+	-	-	0
Summary	BFF PHH	BFF PHH S W MA A		
	S W MA A	C CH L		
This chapter sets out the overall strategy for the built form in Dundrum. Character areas within the Plan area are identified along with general urban design parameters.	CCHL			
Individual site frameworks which will guide future development proposals are then set out for Key Development Areas including the Old Dundrum Shopping Centre, Taney Cross and the former Central Mental Hospital site.				

Commentary

The assessment of the Plan's overall strategy for the built form in Dundrum against Strategic Environmental Objectives (SEOs BFF, PHH, S, W, MA, A, C, CH and L) is consistent with the:

- Environmental effects detailed under subsections 8.2 to 8.7 of this report; and
- Assessments of the selected alternatives for the Plan provided at Section 7 of this report.

Implementing the Plan will help to direct incompatible development away from the most sensitive areas in the County and beyond and to focus on directing compact, sustainable development within and adjacent to the existing built-up footprint of Dundrum. Development of areas within and adjacent to the existing built-up footprint of Dundrum, which is generally more robust, better serviced and better connected than other lands elsewhere in the County and beyond, will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development will be accompanied by placemaking initiatives to enable the Plan area to become a more desirable place to live – so it can sustainably accommodate new residents and maintain and improve services to existing and future communities. Compatible sustainable development in more sensitive locations within the Plan area is also provided for, subject to various requirements relating to environmental protection and management being met.

The Urban Framework and Site Development Frameworks would contribute towards the Statutory consent granting and decision-making framework for land use developments and activities and sustainable development of the Plan area, in combination with other Plan provisions and other plans, programmes, strategies, etc. Potential adverse environmental effects arising from land use development and activities include in-combination effects arising from services and infrastructure to service development, for example those relating to water services, transport and energy.

The SEA process that is being undertaken alongside the preparation of the Plan has brought about various changes to the emerging Plan through an iterative process. Some of these measures are reproduced under Section 9 "Mitigation Measures" of this report – alongside existing measures from the County Development Plan. By integrating SEA recommendations into the Plan, Dún Laoghaire-Rathdown County Council is helping to ensure that:

- The potential significant adverse effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are avoided, reduced or offset; and
- The beneficial environmental effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are maximised.

Environmental considerations, including those relating to sustainable and compact growth, sustainable infrastructure, flood risk, landscape, views and architectural heritage, have been integrated into the Urban Framework and Site Development Frameworks through an interdisciplinary approach which was informed by the environmental considerations.

The Plan's Urban Framework and Site Development Frameworks will contribute towards the sustainable development of the Plan area and the protection and management of the environment.

8.7.3 Chapter 3: People and Homes

	Likely to	Potential Conflict	Probable	No Likely
	<u>Improve</u>	with status of	<u>Conflict</u>	interaction
	status of	SEOs - likely to be	with	with
	SEOs	mitigated	status of	status of
			SEOs -	SEOs
			unlikely	
			to be	
			mitigated	
	+	-	-	0
Summary	BFF PHH	BFF PHH S W MA A		
	S W MA A	C CH L		
The first part of this chapter specifies objectives for some of those elements that are central to the "ten minute neighbourhood" concept - namely	C CH L			
childcare, community facilities, play facilities and schools. Objectives for a new Dundrum, Community, Cultural and Civic Centre, for a community and				
leisure facility on the former Central Mental Hospital, for a school on the old Notre Dame campus, for a playground in Finsbury Park and for Childcare				
facilities are included.				
The second part of the chapter then moves on to look at housing and includes analysis of both existing and future housing using available data relating				
to the type of unit i.e. houses or apartments, and the mix of permitted and planned apartments. This indicates that whilst currently the mix is skewed				
towards houses, future development will reorient that mix of unit types so that it is likely that there will be a significant number of apartments. Policy				
and objectives on height, density and tenure are also set out.				

Commentary

The assessment of the Plan's provisions aimed at creating and maintaining successful neighbourhoods and also protecting residential amenities against Strategic Environmental Objectives (SEOs BFF, PHH, S, W, MA, A, C, CH and L) is consistent with the:

- Environmental effects detailed under subsections 8.2 to 8.7 of this report; and
- Assessments of the selected alternatives for the Plan provided at Section 7 of this report.

Implementing the Plan will help to direct incompatible development away from the most sensitive areas in the County and beyond and to focus on directing compact, sustainable development within and adjacent to the existing built-up footprint of Dundrum. Development of areas within and adjacent to the existing built-up footprint of Dundrum, which is generally more robust, better serviced and better connected than other lands elsewhere in the County and beyond, will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development will be accompanied by placemaking initiatives to enable the Plan area to become a more desirable place to live – so it can sustainably accommodate new residents and maintain and improve services to existing and future communities. Compatible sustainable development in more sensitive locations within the Plan area is also provided for, subject to various requirements relating to environmental protection and management being met.

The People and Homes provisions would contribute towards the Statutory consent granting and decision-making framework for land use developments and activities and sustainable development of the Plan area, in combination with other Plan provisions and other plans, programmes, strategies, etc. Potential adverse environmental effects arising from land use development and activities include in-combination effects arising from services and infrastructure to service development, for example those relating to water services, transport and energy.

The SEA process that is being undertaken alongside the preparation of the Plan has brought about various changes to the emerging Plan through an iterative process. Some of these measures are reproduced under Section 9 "Mitigation Measures" of this report – alongside existing measures from the County Development Plan. By integrating SEA recommendations into the Plan, Dún Laoghaire-Rathdown County Council is helping to ensure that:

- The potential significant adverse effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are avoided, reduced or offset: and
- The beneficial environmental effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are maximised.

The Plan's People and Homes provisions will contribute towards the sustainable development of the Plan area and the protection and management of the environment.

8.7.4 Chapter 4: Transport and Movement

	Likely to Improve status of SEOs	Potential Conflict with status of SEOs - likely to be mitigated	Probable Conflict with status of SEOs - unlikely to be mitigated	No Likely interaction with status of SEOs
Summary	BFF PHH	BFF PHH S W MA A	-	0
One of the assessments which has informed the Plan is an Area Based Transport Assessment or ABTA. An ABTA examines the most sustainable way to manage future transport demand. Chapter 3 details the main transport recommendations arising from the ABTA report with a focus on cycling, walking and public transport and delivering on the "ten minute neighbourhood" concept. The various objectives cover three areas – Dundrum Major Town Centre area, South Dundrum and North Dundrum (Windy Arbour).	S W MA A C CH L	CCHL		
Objectives for the Major Town centre include retaining and extending the existing one way traffic layout and southbound cycle lane on Main street, the delivery of the Dún Laoghaire-Rathdown connector cycle scheme, implementing a one way system on Sydenham Road and improving cycle infrastructure on the bypass.				
In relation to North Dundrum the focus is on changing the Dundrum Road from what it a busy car dominated route to a neighbourhood street, enhancing the Windy Arbour neighbourhood centre area and developing a Dodder to Dundrum pedestrian and cycle route that will pass through the former Central Mental Hospital lands.				

Commentary

The assessment of the Plan's Transport and Movement provisions against Strategic Environmental Objectives (SEOs BFF, PHH, S, W, MA, A, C, CH and L) is consistent with the:

- Environmental effects detailed under subsections 8.2 to 8.7 of this report; and
- Assessments of the selected alternatives for the Plan provided at Section 7 of this report.

Implementing the Plan will help to direct incompatible development away from the most sensitive areas in the County and beyond and to focus on directing compact, sustainable development within and adjacent to the existing built-up footprint of Dundrum. Development of areas within and adjacent to the existing built-up footprint of Dundrum, which is generally more robust, better serviced and better connected than other lands elsewhere in the County and beyond, will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development will be accompanied by placemaking initiatives to enable the Plan area to become a more desirable place to live – so it can sustainably accommodate new residents and maintain and improve services to existing and

future communities. Compatible sustainable development in more sensitive locations within the Plan area is also provided for, subject to various requirements relating to environmental protection and management being met.

The Transport and Movement provisions would contribute towards the Statutory consent granting and decision-making framework for the future development of sustainable transport and movement. Many of these provisions would primarily contribute towards maximising sustainable mobility and associated interactions with emissions to air (including noise and greenhouse gas emissions), energy usage, air quality and human health. The facilitation of journeys by car, in particular, would give rise to emissions to air.

The Transport and Movement provisions would also contribute towards the Statutory consent granting and decision-making framework for land use developments and activities and sustainable development of the Plan area, in combination with other Plan provisions and other plans, programmes, strategies, etc. Potential adverse environmental effects arising from land use development and activities include incombination effects arising from services and infrastructure to service development, for example those relating to water services, transport and energy.

An Area Based Transport Assessment (ABTA) has been prepared and this ABTA has informed the Local Area Plan to the Plan. The key purpose of the ABTA is to guide the future transport and mobility needs of the Local Area Plan area, taking into account the transport demand arising from existing and projected development both within the Local Area Plan boundary and the wider area of influence. Both the ABTA and the Local Area Plan are consistent with the existing and previously assessed National Transport Authority's Greater Dublin Area Transport Strategy 2022-2042, the overall aim of which is to provide a sustainable, accessible and effective transport system for the Greater Dublin Area which meets, among other items, the region's climate change requirements.

The integration of ABTA recommendations into the Local Area Plan provides a more coordinated and more orderly provision of transport infrastructure and services and associated benefits with respect to sustainable mobility, emissions and compact development.

The development of new and existing walkways/cycleways and greenways has the potential to contribute towards sustainable mobility and a better management of mobility in sensitive areas, thereby benefitting various environmental components including habitats at certain locations. The development of these projects, however, presents a variety of potentially adverse environmental effects that would, if unmitigated, have the potential to arise from both the construction and operation of such developments and/or their ancillary infrastructure. These types of infrastructure are often constructed in ecologically and visually sensitive areas adjacent to the banks of rivers and streams. Potential adverse effects would be mitigated both by measures which have been integrated into the Plan which provide for and contribute towards environmental protection, environmental management and sustainable development (including those identified at Section 9 of this report) and by measures arising from lower tier assessments.

The SEA process that is being undertaken alongside the preparation of the Plan has brought about various changes to the emerging Plan through an iterative process. Some of these measures are reproduced under Section 9 "Mitigation Measures" of this report – alongside existing measures from the County Development Plan. By integrating SEA recommendations into the Plan, Dún Laoghaire-Rathdown County Council is helping to ensure that:

- The potential significant adverse effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are avoided, reduced or offset; and
- The beneficial environmental effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are maximised.

As detailed under Section 4.5 "Overarching Transport policies":

"Relevant transport infrastructure projects, such as new greenways, that are not already permitted or provided for by existing plans/ programmes/etc that have been subject to environmental assessment, will be subject to the undertaking of a Corridor and Route Selection Process in two stages: Stage 1 – Route Corridor Identification, Evaluation and Selection; and Stage 2 – Route Identification, Evaluation and Selection.

New transport infrastructure will be considered subject to environmental constraints as appropriate, including those related to habitats and potential impacts (e.g. disturbance from lighting). This will include minimising river crossings, avoiding sensitive habitats, not increasing barriers to flood waters and sustainable design and construction techniques. Mapping of transport infrastructure in this Plan that is not already permitted or provided for by existing plans/programmes/etc. is indicative."

The Plan's Transport and Movement provisions will contribute towards the sustainable development of the Plan area and the protection and management of the environment.

8.7.5 Chapter 5: Climate Action – Adaptation and Mitigation

	Likely to	Potential Conflict	Probable	No Likely
	Improve	with status of	Conflict	interaction
	status of	SEOs - likely to be	with	with
	SEOs	mitigated	status of	status of
		9	SEOs -	SEOs
			unlikely	OLO3
			to be	
			mitigated	
			miligateu	_
	+	-	-	0
Summary	BFF PHH	BFF PHH S W MA A		
	S W MA A	C CH L		
Delivering on the "ten minute neighbourhood" concept can help deliver on climate action measures. This Chapter specifies how climate change	C CH L			
adaptation and mitigation measures will be applied and focuses on the Plan interactions with climate mitigation and adaption from the perspective of				
the approach to green infrastructure, sustainable water management, flood risk and energy planning.				
the approach to green impastracture, sustainable water management, nood tisk and energy planning.				
Objectives include the ungrading of the open cross facilities at Covertment Dark, provision of a lead park on the old changing contracts and provision.				
Objectives include the upgrading of the open space facilities at Sweetmount Park, provision of a local park on the old shopping centre site and provision				
of a wetland park area to the rear of the Carnegie Library.				

Commentary

The assessment of the Plan's Climate Action provisions against Strategic Environmental Objectives (SEOs BFF, PHH, S, W, MA, A, C, CH and L) is consistent with the:

- Environmental effects detailed under subsections 8.2 to 8.7 of this report; and
- Assessments of the selected alternatives for the Plan provided at Section 7 of this report.

Implementing the Plan will help to direct incompatible development away from the most sensitive areas in the County and beyond and to focus on directing compact, sustainable development within and adjacent to the existing built-up footprint of Dundrum. Development of areas within and adjacent to the existing built-up footprint of Dundrum, which is generally more robust, better serviced and better connected than other lands elsewhere in the County and beyond, will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development will be accompanied by placemaking initiatives to enable the Plan area to become a more desirable place to live – so it can sustainably accommodate new residents and maintain and improve services to existing and future communities. Compatible sustainable development in more sensitive locations within the Plan area is also provided for, subject to various requirements relating to environmental protection and management being met.

The Climate Action provisions detailed in this Chapter integrate Green Infrastructure considerations with respect to biodiversity, surface water management, parks and recreation and flood risk management. As set out in the County Development Plan and the RSES Green Infrastructure can be "broadly defined as a strategically planned network of high quality natural and semi-natural areas with other environmental features, which is designed and managed to deliver a wide range of ecosystem services and protect biodiversity in both rural and urban settings". Green infrastructure provides ecological, economic and social benefits through natural solutions. It serves a wide variety of important functions including but not limited to; provision of habitat, increased biodiversity, provision of ecological corridors, climate change adaptation and mitigation, water treatment, water retention, local amenity provision, air quality improvement, cultural and heritage preservation, provision of a mentally restorative environment and flood mitigation. The Green Infrastructure approach recognises the Ecosystem Services Approach, which integrates the management of land, water and living resources in a way that promotes conservation and equitable sustainable use. It is also closely linked to the idea of nature-based solutions (e.g. landscaping, SuDS, creating permeable green areas, and providing green roofs, restoring habitats such as wetlands, woodlands, and hedgerows to absorb/ sequester carbon dioxide) and the promotion of both adaptation and migration measures that favour such solutions. The Green Infrastructure approach to development in Dundrum is integrated with the county-wide green infrastructure network and method. The Plan lands include and adjoin green spaces and waterways. Providing linkages between these areas, enhancing their ecological and biodiversity role, utilising them in both nature-based solutions and in climate adaptation and mitigation measures are all important elements of the Local Area Plan. The Plan's detai

The development of green infrastructure would facilitate: contributions towards increases in sustainable mobility and reductions in greenhouse gas emissions; increases in flood risk management and protection of human health; protection and management biodiversity and water quality; and protection cultural heritage and landscape sensitivities. The development of green infrastructure also potentially conflicts with most environmental components. This type of infrastructure is often constructed in ecologically and visually sensitive areas adjacent to the banks of rivers and streams. Potential adverse effects would be mitigated both by measures which have been integrated into the Plan which provide for and contribute towards environmental protection, environmental management and sustainable development (including those identified at Section 9 of this report) and by measures arising from lower tier assessments.

Provisions relating to the management of flood risk and surface water drainage, falling under "climate adaptation", would benefit the protection of human health, biodiversity, flora and fauna, cultural heritage, water status and existing infrastructure and services. Flood risk management infrastructure (if required) has the potential to result in significant adverse environmental effects during construction and operation on most environmental components. These types of infrastructure are often constructed in ecologically and visually sensitive areas and adjacent to the banks of rivers and streams. Potential adverse effects will be mitigated both by measures which have been integrated into the Plan (including those identified at Section 9 of this report) and by measures arising from lower tier assessments.

Climate mitigation provisions, relating to energy efficiency, renewable energy and decarbonising motor transport, would contribute towards achieving various government objectives and targets including those relating to energy security, reducing greenhouse gas emissions and increasing the amount of energy to be consumed from renewable sources. Further general commentary on the types of potential effects arising from two renewable energy types mentioned in the Plan is provided below.

Geothermal Energy

Positive Effects: Contribution towards renewable energy and minimisation of greenhouse gases targets Potential Negative Effects, if unmitigated:

- Potential impacts upon the status of waters and ecology contained within, especially arising from changes in the temperature of groundwater which can impact upon the structure and ecology of the aquifer and any dependent surface waters this could interact with drinking water sources
- Potential interactions leading to change in structure of soil and geology
- Potential impacts upon archaeology, including unknown underground archaeology
- Potential impacts upon context of archaeological and architectural heritage arising from surface installation
- Large scale installations may have visual impacts these would depend on perception of the relevant area

Solar Energy and Solar Thermal Energy

Positive Effects: Contribution towards renewable energy and minimisation of greenhouse gases targets

Potential Negative Effects, if unmitigated:

- Potential impacts on architectural heritage including the context of this heritage at micro scale
- Potential impacts on habitats and species and micro scale
- Large scale installations may have visual impacts these would depend on perception of the relevant area, however; these are unlikely to be provided for

The Climate Action provisions would contribute towards the Statutory consent granting and decision-making framework for land use developments and activities and sustainable development of the Plan area, in combination with other Plan provisions and other plans, programmes, strategies, etc. Potential adverse environmental effects arising from land use development and activities include in-combination effects arising from services and infrastructure to service development, for example those relating to water services, transport and energy.

Provisions relating to water supply and wastewater treatment would, by protecting water resources, providing safe drinking water and appropriately treating waste water, contribute towards the protection of various environmental components including: human health, biodiversity and flora and fauna, the status of waters, flood risk management and soil. There would be potential for significant adverse environmental effects upon various environmental components to arise during construction of water services infrastructure. Such potential significant adverse effects could also arise during operation: the protection of human health, biodiversity and flora and fauna and the status of waters, could all be conflicted with by outflows and abstractions. Mitigation has been integrated into the both the Local Area Plan and the existing County Development Plan that address these effects.

The SEA process that is being undertaken alongside the preparation of the Plan has brought about various changes to the emerging Plan through an iterative process. Some of these measures are reproduced under Section 9 "Mitigation Measures" of this report – alongside existing measures from the County Development Plan. By integrating SEA recommendations into the Plan, Dún Laoghaire-Rathdown County Council is helping to ensure that:

- The potential significant adverse effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are avoided, reduced or offset: and
- The beneficial environmental effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are maximised.

It is policy of the Plan to facilitate compliance with the requirements of the EU Water Framework Directive and any relevant legislation. In this regard, the Council will facilitate compliance with the relevant objectives and measures set out in the forthcoming 'River Basin Management Plan' (2022- 2028) and associated Programme of Measures, where relevant. In order to ensure the adequate protection and management of the environment, the requirements of the Local Area Plan, including "Policy DLAP40 – Water Framework Directive", must be complied with: "...Applications for development under the Plan must demonstrate that the proposal for development would not adversely affect a water body's ability to meet its objectives under the Water Framework Directive, individually as a result of the proposed development or cumulatively, in combination with other developments."

The focus of many of the provisions in this Chapter is environmental protection and management – many of the provisions are repeated in Section 9 "Mitigation Measures" of this report. Please also refer to Section 8.5 "Interactions with Climate Mitigation and Adaptation".

8.7.6 Chapter 6: Dundrum Multifunctional Town & Neighbourhood Centres

		D 1 11 10 61 1	B 1 11	
		Potential Conflict		No Likely
	<u>Improve</u>	with status of		interaction
	status of	SEOs - likely to be	with	with
	SEOs	mitigated	status of	status of
			SEOs -	SEOs
			unlikely	
			to be	
			mitigated	
	+	-	-	0
Summary	BFF PHH	BFF PHH S W MA A		
	S W MA A	C CH L		
This chapter explores the roles of both Dundrum as a town centre and the two neighbourhood centre areas within the Plan area – Frankfort and Windy	C CH L			
Arbour. The town offers many opportunities for a variety of what are called multifunctional uses beyond retail whilst the Windy Arbour Neighbourhood				
Centre will offer opportunities when new homes are delivered on the former Central Mental Hospital site.				

Commentary

The assessment of the Plan's Dundrum Multifunctional Town & Neighbourhood Centres provisions against Strategic Environmental Objectives (SEOs BFF, PHH, S, W, MA, A, C, CH and L) is consistent with the:

- Environmental effects detailed under subsections 8.2 to 8.7 of this report; and
- Assessments of the selected alternatives for the Plan provided at Section 7 of this report.

Implementing the Plan will help to direct incompatible development away from the most sensitive areas in the County and beyond and to focus on directing compact, sustainable development within and adjacent to the existing built-up footprint of Dundrum. Development of areas within and adjacent to the existing built-up footprint of Dundrum, which is generally more robust, better serviced and better connected than other lands elsewhere in the County and beyond, will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development will be accompanied by placemaking initiatives to enable the Plan area to become a more desirable place to live – so it can sustainably accommodate new residents and maintain and improve services to existing and future communities. Compatible sustainable development in more sensitive locations within the Plan area is also provided for, subject to various requirements relating to environmental protection and management being met.

The Dundrum Multifunctional Town & Neighbourhood Centres provisions would contribute towards the Statutory consent granting and decision-making framework for land use developments and activities and sustainable development of the Plan area, in combination with other Plan provisions and other plans, programmes, strategies, etc. Potential adverse environmental effects arising from land use development and activities include in-combination effects arising from services and infrastructure to service development, for example those relating to water services, transport and energy.

The SEA process that is being undertaken alongside the preparation of the Plan has brought about various changes to the emerging Plan through an iterative process. Some of these measures are reproduced under Section 9 "Mitigation Measures" of this report – alongside existing measures from the County Development Plan. By integrating SEA recommendations into the Plan, Dún Laoghaire-Rathdown County Council is helping to ensure that:

- The potential significant adverse effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are avoided, reduced or offset; and
- The beneficial environmental effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are maximised.

The Dundrum Multifunctional Town & Neighbourhood Centres provisions will contribute towards the sustainable development of the Plan area and the protection and management of the environment.

8.7.7 Chapter 7: Employment

	Likely to Improve status of SEOs	Potential Conflict with status of SEOs - likely to be mitigated	Probable Conflict with status of SEOs - unlikely to be mitigated	No Likely interaction with status of SEOs
Summary Provision of employment in the plan area is important given the strategic employment location of the Major Town Centre and also the role that employment plays in delivery of the "ten minute neighbourhood" concept. This chapter includes policy and objectives on the Dundrum Business Park, remote working, supporting the ongoing retail role of the town whilst at the same time supporting diversification into other employment uses. The chapter also examines tourism in the area and includes an objective to support the provision of a hotel in Dundrum and to support the role of the Airfield Estate.	BFF PHH S W MA A C CH L	BFF PHH S W MA A C CH L		

Commentary

The assessment of the Plan's Employment provisions against Strategic Environmental Objectives (SEOs BFF, PHH, S, W, MA, A, C, CH and L) is consistent with the:

- Environmental effects detailed under subsections 8.2 to 8.7 of this report; and
- Assessments of the selected alternatives for the Plan provided at Section 7 of this report.

Implementing the Plan will help to direct incompatible development away from the most sensitive areas in the County and beyond and to focus on directing compact, sustainable development within and adjacent to the existing built-up footprint of Dundrum. Development of areas within and adjacent to the existing built-up footprint of Dundrum, which is generally more robust, better serviced and better connected than other lands elsewhere in the County and beyond, will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development will be accompanied by placemaking initiatives to enable the Plan area to become a more desirable place to live – so it can sustainably accommodate new residents and maintain and improve services to existing and future communities. Compatible sustainable development in more sensitive locations within the Plan area is also provided for, subject to various requirements relating to environmental protection and management being met.

The Employment provisions would contribute towards the Statutory consent granting and decision-making framework for land use developments and activities and sustainable development of the Plan area, in combination with other Plan provisions and other plans, programmes, strategies, etc. Potential adverse environmental effects arising from land use development and activities include in-combination effects arising from services and infrastructure to service development, for example those relating to water services, transport and energy.

The SEA process that is being undertaken alongside the preparation of the Plan has brought about various changes to the emerging Plan through an iterative process. Some of these measures are reproduced under Section 9 "Mitigation Measures" of this report – alongside existing measures from the County Development Plan. By integrating SEA recommendations into the Plan, Dún Laoghaire-Rathdown County Council is helping to ensure that:

- The potential significant adverse effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are avoided, reduced or offset; and
- The beneficial environmental effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are maximised.

The Employment provisions will contribute towards the sustainable development of the Plan area and the protection and management of the environment.

8.7.8 Chapter 8: Heritage and Conservation

	Likely to Improve status of SEOs	Potential Conflict with status of SEOs - likely to be mitigated	Probable Conflict with status of SEOs - unlikely to be mitigated	No Likely interaction with status of SEOs
Summary	+ BFF PHH	BFF PHH S W MA A	-	0
· · · · · · · · · · · · · · · · · · ·	S W MA A	CCHL		

Commentary

The assessment of the Plan's Heritage and Conservation provisions against Strategic Environmental Objectives (SEOs BFF, PHH, S, W, MA, A, C, CH and L) is consistent with the:

- Environmental effects detailed under subsections 8.2 to 8.7 of this report; and
- Assessments of the selected alternatives for the Plan provided at Section 7 of this report.

Implementing the Plan will help to direct incompatible development away from the most sensitive areas in the County and beyond and to focus on directing compact, sustainable development within and adjacent to the existing built-up footprint of Dundrum. Development of areas within and adjacent to the existing built-up footprint of Dundrum, which is generally more robust, better serviced and better connected than other lands elsewhere in the County and beyond, will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development will be accompanied by placemaking initiatives to enable the Plan area to become a more desirable place to live – so it can sustainably accommodate new residents and maintain and improve services to existing and future communities. Compatible sustainable development in more sensitive locations within the Plan area is also provided for, subject to various requirements relating to environmental protection and management being met.

The Heritage and Conservation provisions would contribute towards the Statutory consent granting and decision-making framework for land use developments and activities and sustainable development of the Plan area, in combination with other Plan provisions and other plans, programmes, strategies, etc. Potential adverse environmental effects arising from land use development and activities include in-combination effects arising from services and infrastructure to service development, for example those relating to water services, transport and energy.

The SEA process that is being undertaken alongside the preparation of the Plan has brought about various changes to the emerging Plan through an iterative process. Some of these measures are reproduced under Section 9 "Mitigation Measures" of this report – alongside existing measures from the County Development Plan. By integrating SEA recommendations into the Plan, Dún Laoghaire-Rathdown County Council is helping to ensure that:

- The potential significant adverse effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are avoided, reduced or offset: and
- The beneficial environmental effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are maximised.

A focus of the Heritage and Conservation provisions is to ensure the appropriate protection and management of architectural and archaeological heritage. These provisions will contribute towards the sustainable development of the Plan area and the protection and management of the environment.

8.7.9 Chapter 9: Implementation and Monitoring

	<u>Improve</u>	Potential Conflict with status of SEOs - likely to be mitigated	<u>Conflict</u>	No Likely interaction with status of SEOs
	+	_	unlikely to be mitigated	0
Summary This chapter looks at how the LAP will be implemented, exploring timelines and monitoring of delivery and outcomes.	BFF PHH S W MA A C CH L			

Commentary

The assessment of the Plan's Implementation and Monitoring provisions against Strategic Environmental Objectives (SEOs BFF, PHH, S, W, MA, A, C, CH and L) is consistent with the:

- Environmental effects detailed under subsections 8.2 to 8.7 of this report; and
- Assessments of the selected alternatives for the Plan provided at Section 7 of this report.

Implementing the Plan will help to direct incompatible development away from the most sensitive areas in the County and beyond and to focus on directing compact, sustainable development within and adjacent to the existing built-up footprint of Dundrum. Development of areas within and adjacent to the existing built-up footprint of Dundrum, which is generally more robust, better serviced and better connected than other lands elsewhere in the County and beyond, will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development will be accompanied by placemaking initiatives to enable the Plan area to become a more desirable place to live – so it can sustainably accommodate new residents and maintain and improve services to existing and future communities. Compatible sustainable development in more sensitive locations within the Plan area is also provided for, subject to various requirements relating to environmental protection and management being met.

The Implementation and Monitoring provisions would contribute towards the Statutory consent granting and decision-making framework for land use developments and activities and sustainable development of the Plan area, in combination with other Plan provisions and other plans, programmes, strategies, etc. Potential adverse environmental effects arising from land use development and activities include incombination effects arising from services and infrastructure to service development, for example those relating to water services, transport and energy.

The SEA process that is being undertaken alongside the preparation of the Plan has brought about various changes to the emerging Plan through an iterative process. Some of these measures are reproduced under Section 9 "Mitigation Measures" of this report – alongside existing measures from the County Development Plan. By integrating SEA recommendations into the Plan, Dún Laoghaire-Rathdown County Council is helping to ensure that:

- The potential significant adverse effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are avoided, reduced or offset; and
- The beneficial environmental effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are maximised.

The Implementation and Monitoring provisions will contribute towards the sustainable development of the Plan area and the protection and management of the environment.

Section 9 Mitigation Measures

9.1 Introduction

Mitigation measures are measures envisaged to prevent, reduce and, as fully as possible, offset any significant adverse impacts on the environment of implementing the Plan. Various environmental sensitivities and issues have been communicated to the Council through the SEA, Appropriate Assessment (AA) and Strategic Flood Risk Assessment (SFRA) processes. By integrating all related recommendations into the Plan, the Council have ensured that both the beneficial environmental effects of implementing the Plan have been and will be maximised and that potential adverse effects have been and will be avoided, reduced or offset.

Mitigation was achieved through:

- Strategic work undertaken by the Council to ensure contribution towards environmental protection and sustainable development;
- Considering alternatives for the Plan;
- The integration of environmental considerations into zoning provisions of the Plan;
- The integration of individual SEA, AA and SFRA provisions into the text of the Plan; and
- The integration of individual provisions into the text of the Dún Laoghaire-Rathdown County Development Plan 2022-2028.

9.2 Strategic work undertaken by the Council to ensure contribution towards environmental protection and sustainable development

In advance of the placing of the Draft Plan on public display, Dún Laoghaire-Rathdown County Council undertook various works in order to inform the preparation of the Plan. This included a detailed population analysis and preparation of an Area Based Transport Analysis, which has informed the Plan.

The findings of this strategic work have been integrated into the Plan and will contribute towards both environmental protection and management and sustainable development.

The undertaking of this SEA process was part of this strategic work and contributed towards the integration of environmental considerations into individual Plan provisions.

9.3 Consideration of Alternatives

Although strategic alternatives in relation to the content of the Plan were guided by higher level planning objectives (see Section 6), as part of the Plan preparation/SEA process, the Council considered a number of alternatives for the Plan.

These alternatives were assessed by the SEA process (see Section 7) and the findings of this assessment informed the selection of preferred alternatives, facilitating an informed choice with respect to the type of Plan that was prepared, placed on public display and adopted.

9.4 Integration of environmental considerations into the Plan's Urban Framework and Site Development Frameworks

Environmental considerations, including those relating to sustainable and compact growth, sustainable mobility, sustainable infrastructure, flood risk, landscape, views and architectural heritage, were integrated into the Plan's Urban Framework and Site Development Frameworks through an interdisciplinary approach.

The Plan seeks to achieve sustainable and compact growth, taking into account the various requirements set out in the higher-level NPF, Eastern and Midland RSES and Dún Laoghaire-Rathdown County Development Plan 2022-2028.

9.5 Integration of individual provisions into the text of the Plan

Various provisions have been integrated into the text of the Plan through the Plan-preparation and SEA, SFRA and AA processes. Both the Planning and the assessment teams contributed towards the mitigation which was developed over multiple iterations and was informed by, inter alia, various communications through the SEA, AA and SFRA processes.

Table 9.1 links key mitigation measure(s) to the likely significant effects of implementing the Plan, if unmitigated. 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.

9.6 Integration of individual provisions into the text of the Development Plan

In addition to the individual provisions integrated into the text of the Local Area Plan, individual provisions relating to environmental protection and management have been integrated into the existing Dún Laoghaire-Rathdown County Development Plan 2022-2028. These measures, which must be complied with by development under the Local Area Plan⁶⁵, are identified alongside the Local Area Plan measures on Table 9.1.

⁶⁵ As identified in Section 1.3 of the Local Area Plan:

[&]quot;The County Development Plan sits higher in the planning hierarchy and as such, the policy objectives contained in the CDP pertain to the LAP lands. They are not generally duplicated in the DLAP. It is a provision of this Plan to ensure that all of the provisions from the County Development Plan identified as mitigation in the SEA Environmental Report and Natura Impact Report shall apply regardless of whether the County Development Plan expires and/or is reviewed."

Table 9.1 Integration of Environmental Considerations into the Local Area Plan and the County Development Plan⁶⁶

Table 9.1	integration of Env	ironmental Considerations into the Local	Area Plan and the County Development Plan ⁶⁶
Topic	Potentially Significant	Local Area Plan measures, including:	Existing Dún Laoghaire-Rathdown County Development Plan 2022-2028 measures, including:
	Adverse Effect, if	-	
	Unmitigated		
Various Biodiversity and flora and fauna	Arising from both construction and operation of	Various, detailed Urban Framework and Site Development Frameworks provisions, including those relating to sustainable and compact growth, sustainable mobility, flood risk, landscape, views and architectural heritage. Section 4.5 Overarching Transport policies Relevant transport infrastructure projects, such as new greenways, that are not already permitted or provided for by existing plans/ programmes/etc that have been subject to environmental assessment, will be subject to the undertaking of a Corridor and Route Selection Process in two stages: Stage 1 – Route Corridor Identification, Evaluation and Selection; and Stage 2 – Route Identification, Evaluation and Selection; and Stage 2 – Route Identification, Evaluation and Selection infrastructure will be considered subject to environmental constraints as appropriate, including those related to habitats and potential impacts (e.g. disturbance from lighting). This will include minimising river crossings, avoiding sensitive habitats, not increasing barriers to flood waters and sustainable design and construction techniques. Mapping of transport infrastructure in this Plan that is not already permitted or provided for by existing plans/programmes/etc. is indicative. Also refer to measures under other environmental components including Soil, Water and Air and Climatic Factors and Landscape.	Policy Objective T25: Environmental Assessment of New Roads It is a Policy Objective that where projects for new roads, identified under Section 5.8, are not already perovided for by existing plans/programme or are not already permitted, that the feasibility of progressing these projects shall be examined, taking into account environmental sensitivities as identified in the SEA Environmental Report (including greenhouse gas emissions and other emissions to air) and the objectives of the Plan relating to sustainable mobility. A Corridor and Route Selection Process will be undertaken where appropriate, for relevant new road infrastructure in two stages: Stage 1 – Route Corridor Identification, Evaluation and Selection. In Implementing this Objective, the Council will comply with any national policy or guidelines issued relating to the assessment of greenhouse gas emissions and other emissions to air for new transport projects. Green Infrastructure Policy Objective 6181: Green Infrastructure Strategy It is a Policy Objective to continue to implement, and update, the DLR Green Infrastructure (GI) Strategy, to protect existing green Infrastructure and encourage and facilitate, in consultation with relevant stakeholders, the development, design and management of high quality natural and semi-natural areas. This recognises the ecosystems approach and the synergies that can be achieved with regard to sustainable transport, provision of open space, sustainable management of water, protection and enhancement of biodiversity. Policy Objective OSRS: Trees, Woodland and Forestry It is a Policy Objective to implement the objectives and policies of the Tree Policy and the forthcoming Tree Strategy for the County, to ensure that the tree cover in the County is managed, and developed to optimise the environmental, climatic and educational benefits, which derive from an urban forest; and include a holistic urban forestry approach. Policy Objective OSRS: Greenways and Blueways Network: It is a Policy Objective to develop a
and identify	development and associated infrastructure: • Loss of/damage to biodiversity in designated sites	Objective PR3 – Dundrum Main Street Tree Planting and Urban Greening: It is an objective to support and promote additional tree planting and urban greening at appropriate locations on public	Policy Objective T30: Street Lighting It is a Policy Objective to provide and maintain street lighting on the public road/footway/cycleways throughout the County in accordance with commonly accepted best practice, the Council's public lighting masterplan and the upgrade of sodium lights to LEDs.

⁶⁶ Non-material changes to individual Plan provisions referenced in this report may be updated during the finalisation of the Plan, including numbering, formatting and graphic design.

SEA Environmental Report for the Dundrum Local Area Plan 2023					
Topic	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including:	Existing Dún Laoghaire-Rathdown County Development Plan 2022-2028 measures, including:		
	(including European	and privately-owned lands fronting Main Street connecting into	Policy Objective GIB7: National Marine Planning Framework (NMPF)		
	Sites and Wildlife	the line of mature trees on Sandyford Road.	It is a Policy Objective to support the policies and objectives as appropriate and relevant of the forthcoming National Marine Planning		
	Sites) and Annexed	Policy DLAP31 - Protected areas and habitats and	Framework (NMPF), with respect to the conservation, management, and protection for a sustainable future for the marine area.		
	habitats and species,	species:	Policy Objective GIB18: Protection of Natural Heritage and the Environment		
	listed species,	It is policy to:	It is a Policy Objective to protect and conserve the environment including, in particular, the natural heritage of the County and to		
	ecological connectivity	Conserve Protected Areas and other high-quality	conserve and manage Nationally and Internationally important and EU designated sites - such as Special Protection Areas (SPAs),		
	and non-designated	habitats and species thereby ensuring a rich and diverse	Special Areas of Conservations (SACs), proposed Natural Heritage Areas (pNHAs) and Ramsar sites (wetlands) - as well as non-		
	habitats; and	environment within the Plan area.	designated areas of high nature conservation value known as locally important areas which also serve as 'Stepping Stones' for the		
	disturbance to biodiversity and flora	Ensure biodiversity is factored into nature based solutions when developing proposels within the DLAD.	purposes of Article 10 of the Habitats Directive. Policy Objective GIB19: Habitats Directive		
	and fauna;	solutions when developing proposals within the DLAP area	It is a Policy Objective to ensure the protection of natural heritage and biodiversity, including European sites that form part of the		
	Habitat loss,	Conserve and restore biodiversity in line with the key	Natura 2000 network, in accordance with relevant EU Environmental Directives and applicable National Legislation, Policies, Plans and		
	fragmentation and	theme of the dlr County Biodiversity Action Plan 2021 –	Guidelines.		
	deterioration,	2025.	Policy Objective GIB20: Biodiversity Plan		
	including patch size	Objective GI1 - Dodder/Slang corridor and linkages:	It is a Policy Objective to support the provisions of the forthcoming DLR County Biodiversity Action Plan, 2021 – 2025.		
	and edge effects; and	It is an objective to enhance and develop biodiversity along the	Policy Objective GIB21: Designated Sites		
	Disturbance (e.g. due)	Dodder and Slang rivers and the Wyckham Stream.	It is a Policy Objective to protect and preserve areas designated as proposed Natural Heritage Areas, Special Areas of Conservation,		
	to noise and lighting	Objective GI2 – Wildlife Corridor:	and Special Protection Areas. It is Council policy to promote the maintenance and as appropriate, delivery of 'favourable' conservation		
	along transport	It is an objective to	status of habitats and species within these areas.		
	corridors) and displacement of	Allow the relevant wildlife corridor – <i>Ticknock to the River Dodder Corridor</i> - as set out in the dlr County	Policy Objective GIB22: Non-Designated Areas of Biodiversity Importance It is a Policy Objective to protect and promote the conservation of biodiversity in areas of natural heritage importance outside		
	protected species such	Biodiversity Action Plan 2021 - 2025 to inform decision	Designated Areas and to ensure that notable sites, habitats and features of biodiversity importance - including species protected		
	as birds (e.g. swifts	making within the DLAP area.	under the Wildlife Acts 1976 and 2000, the Birds Directive 1979, the Habitats Directive 1992, Birds and Habitats Regulations 2011,		
	and owls) and bats.	Identify opportunities to enhance and restore the	Flora (Protection) Order, 2015, Annex I habitats, local important areas, wildlife corridors and rare species - are adequately protected.		
	•	Ticknock to River Dodder Wildlife Corridor within the	Ecological assessments will be carried out for all developments in areas that support, or have potential to support, features of		
		LAP lands.	biodiversity importance or rare and protected species and appropriate mitigation/ avoidance measures will be implemented. In		
		Objective GI3 – Deculverting:	implementing this policy regard shall be had to the Ecological Network including the forthcoming DLR Wildlife Corridor Plan and the		
		It is an objective in accordance with the GI strategy of the	recommendations and objectives of the Green City Guidelines (2008) and 'Ecological Guidance Notes for Local Authorities and		
		County Development Plan 2022 - 2028 to seek opportunities	Developers' (Dún Laoghaire- Rathdown Version 2014). Policy Objective GIB23: County-Wide Ecological Network		
		where appropriate to open up the culverted elements of the River Slang and reconnect the riverine habitats. Any such	It is a Policy Objective to protect the Ecological Network which will be integrated into the updated Green Infrastructure Strategy and		
		proposals shall have regard to SFRA requirements and	will align with the DLR County Biodiversity Action Plan. Creating this network throughout the County will also improve the ecological		
		Appropriate Assessment requirements.	coherence of the Natura 2000 network in accordance with Article 10 of the Habitats Directive. The network will also include non-		
		Objective GI4 – Hedgerows:	designated sites.		
		It is an objective to protect and maintain important	Policy Objective GIB24: Rivers and Waterways		
		hedgerows/tree lines where appropriate within the LAP lands	It is a Policy Objective to maintain and protect the natural character and ecological value of the river and stream corridors in the		
		(including all those identified in the 'DLR Biodiversity Action	County and where possible to enhance existing channels and to encourage diversity of habitat and nature-based solutions that		
		Plan, 2021-2025' and any hedgerows which form part of townland boundaries) and promote native hedgerow	incorporate biodiversity features. It is also policy (subject to the sensitivity of the riverside habitat), to provide public access to riparian corridors, to promote improved passive recreational activities.		
		enhancement and planting.	Policy Objective GIB25: Hedgerows		
		Policy DLAP32 – Sustainable Water Management:	It is a Policy Objective to retain and protect hedgerows in the County from development, which would impact adversely upon them.		
		It is a policy to implement the main elements of the DLR GI	In addition, the Council will promote the protection of existing site boundary hedgerows and where feasible require the retention of		
		strategy in relation to water management including:	these when considering a grant of planning permission for all developments. The Council will promote the County's hedgerows by		
		Reducing the rate, volume, and improve the quality of	increasing coverage, where possible, using locally native species and to develop an appropriate code of practice for road hedgerow		
		surface water runoff	maintenance. The Council will promote the protection of existing hedgerows when considering a grant of planning permission for all		
		Managing runoff at -source through the use of	developments.		
		infiltration systems	Policy Objective GIB27: Green Belts It is a Policy Objective to retain the individual physical character of towns and development areas by the designation of green helt.		
		Promoting local sustainable urban drainage systems (SuDS), 'Green Streets' and green roofs	It is a Policy Objective to retain the individual physical character of towns and development areas by the designation of green belt areas, where appropriate.		
		Enabling SuDS to be located in the public realm	Policy Objective GIB28: Invasive Species		
		Utilizing the river Slang where possible as a natural	It is a Policy Objective to prepare an 'Invasive Alien Species Action Plan' for the County which will include actions in relation to		
		foundations for a GI corridors	invasive alien species (IAS) surveys, management and treatment and to also ensure that proposals for development do not lead to		
		Policy DLAP33- SuDS:	the spread or introduction of invasive species. If developments are proposed on sites where invasive species are or were previously		
		It is policy to ensure that Sustainable Drainage Systems (SuDS)	present, the applicants will be required to submit a control and management program for the particular invasive species as part of		
		is applied to any development in the DLAP area and that site	the planning process and to comply with the provisions of the European Communities Birds and Habitats Regulations 2011 (S.I.		
		specific solutions to surface water drainage systems are	477/2011).		

Adve	entially Significant verse Effect, if nitigated	Local Area Plan measures, including:	Existing Dún Laoghaire-Rathdown County Development Plan 2022-2028 measures, including:
Unm	nitigated	developed which meet the requirements of the Water Framework Directive and associated River Basin Management Plan. SuDS measures may include green roofs, permeable paving, detention basins, infiltration systems etc. Policy DLAP34 – Surface Waters Regulations: It is a policy to ensure the implementation of the surface water legislation Environmental Objectives (Surface Waters) Regulations 2009 to ensure that development permitted would not have an unacceptable impact on water quality including surface waters, ground water, river corridors, estuarine waters, bathing waters, coastal and transitional waters. Development within the LAP area shall comply with the policies and objectives of the County Development Plan relating to protection of existing water and drainage infrastructure. Objective G15 – Extension and Enhancement of Woodlands: It is an objective to - where possible - enhance and extend suitable woodland areas and treelines within the LAP lands. Any woodlands or treelines within areas demarcated as wildlife corridors and/or hedgerows on the Wildlife Corridor Map contained in the 'DLR Biodiversity Action Plan, 2021-2025' are targeted for enhancement and extension under this objective. Objective G16 – Re-wilding and Habitat Restoration / Creation: It is an objective to support the development and implementation of re-wilding projects on appropriate sites within the LAP and to promote the use of these sites for the enhancement and preservation of Biodiversity on the Ticknock to River Dodder Wildlife Corridor. Objective G17 – Slang Parkland SuDS measures: It is an objective that any areas of potential future linear parkland located along the Slang should look to incorporate Nature Based Solutions which include for biodiversity and habitat restoration such as wetlands, linear swales, bioretention areas, filter drains etc. as part of any potential future works. Objective G19 — Sweetmount Park: It is an objective that any future works to the Dundrum Library site and existing brownfield site located to	Policy Objective G1B29: Nature Based Solutions It is a Policy Objective to increase the use of Nature Based Solutions (NBS) within the County and to promote and apply adaption and mitigation actions that favour NBS, which can have multiple benefits to the environment and communities. NBS has a role not only to meet certain infrastructure related needs (e.g. flooding management), and development needs, but also to maintain or benefit the quality of ecosystems, habitats, and species. Policy Objective E11: Sustainable Management of Water It is a Policy Objective to work with Irish Water: **To ensure the efficient and sustainable use and development of water resources and water services infrastructure in order to manage and conserve water in a manner that supports climate action, the circular economy, a healthy society and protection of the environment. (Consistent with NSO 9 of the NPF, RSO 7, RPO 10.1 of the RSES) **To continue the development and improvement of the water supply and wastewater systems throughout Dún Laoghaire-Rathdown in order to meet the anticipated water and wastewater requirements of the County. **To ensure facilities comply with the Water Framework Directive and the Habitats Directive. **To ensure facilities comply with the Water Framework Directive and the Habitats Directive. **Policy Objective IT1: Water Supply and Wastewater treatment and Appropriate Assessment. **It is a Policy Objective to Teru Under Teach and Teach Teach and Habitats Directive. **Policy Objective IT1: Water Supply and Wastewater treatment and Appropriate Assessment. **It is a Policy Objective to Teach Water Supply and Wastewater and Appropriate Assessment. **It is a Policy Objective Teach Tea

Topic	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including:	Existing Dún Laoghaire-Rathdown County Development Plan 2022-2028 measures, including:
		design of new open spaces will be required to have regard to all users, regardless of age or ability (refer to Policies and Objectives in Chapter 3). Objective GI11 – Provision of a local park: It is an objective to provide for a local park of minimum 2000 sq metres on the site of the Old Shopping Centre, Dundrum (see chapter 2 for further detail). Objective GI12 – Dundrum Library/HSE site It is an objective to provide a local park incorporating SUDs, wetland and semi natural habitat elements on the site to the rear of the existing Carnegie library. Any proposals should explore wildlife corridor connectivity along the river and between the site and Finsbury Park and Sweetmount Park.	
Population and human health	Potential adverse effects arising from flood events. Potential interactions if effects arising from environmental vectors.	Also refer to measures under other environmental components including Soil, Water and Air and Climatic Factors.	Also refer to measures under other environmental components including Soil, Water and Air and Climatic Factors. Policy Objective T27: Traffic Noise It is a Policy Objective to ensure that traffic noise levels are considered as part of new developments along major roads/rail lines in accordance with best practice guidelines. Policy Objective E114: Air and Noise Pollution It is a Policy Objective: • To implement the provisions of national and EU Directives on air and noise pollution and other relevant legislative requirements in conjunction with other agencies as appropriate. (Consistent with RPO 10.10 of the RSES) • To maintain and manage a Dublin County ambient air quality monitoring network in conjunction with the EPA and TII and to make available to the public the resulting air quality measurements via the EPA website www.epa.ie/air/quality. • To support the implementation of objectives of the 'Dublin Agglomeration Environmental Noise Action Plan 2018-2023'. Policy Objective E115: Light Pollution It is a Policy Objective to ensure that the design of external lighting schemes minimise the incidence of light spillage or pollution in the immediate surrounding environment and has due regard to the residential amenity of surrounding areas. Policy Objective E116: Water Pollution It is a Policy Objective to implement the provisions of water pollution abatement measures in accordance with national and EU Directives and other legislative requirements in conjunction with other agencies as appropriate. Policy Objective E117: Major Accidents It is a Policy Objective to have regard to the provisions of the Major Accidents Directive (European Council Directive 2012/110/EU). This Directive relates to the control of major accident hazards involving dangerous substances and its objectives are to prevent major accidents and limit the consequences of such accidents.
Soil	Potential adverse effects on the hydrogeological and ecological function of the soil resource Potential for riverbank erosion.	Also refer to measures under other environmental components including Water.	Also refer to measures under other environmental components including Water. 12.9.6 New Development/Change of Use - Environmental Impacts 12.9.6 New Development/Change of Use - Environmental Impacts, including: Where brownfield redevelopment is proposed, require adequate and appropriate investigations to be carried out into the nature and extent of any soil and groundwater contamination and the risks associated with site development work.
Water	Potential adverse effects upon the status of water bodies and entries to the WFD Register of Protected Areas (ecological and human value), arising from changes in quality, flow and/or morphology. Increase in flood risk and associated effects associated with flood events.	Also refer to measures under other environmental components including Soil and Material Assets. Objective GI1 – Dodder/Slang corridor and linkages: It is an objective to enhance and develop biodiversity along the Dodder and Slang rivers and the Wyckham Stream. Objective GI2 – Wildlife Corridor: It is an objective to Allow the relevant wildlife corridor – Ticknock to the River Dodder Corridor - as set out in the dlr County Biodiversity Action Plan 2021 - 2025 to inform decision making within the DLAP area. Identify opportunities to enhance and restore the Ticknock to River Dodder Wildlife Corridor within the LAP lands.	Also refer to measures under other environmental components including Soil and Material Assets. Policy Objective E15: River Basin Management Plans (RMBPs) It is a Policy Objective: • To ensure the delivery of the relevant policies and objectives of the River Basin Management Plan for Ireland 2018 – 2021 and any subsequent plan, including those relating to protection of water status, improvement of water status, prevention of deterioration and meeting objectives for designated protected sites. • To support Irish Water in its implementation of Water Quality Management Plans for ground, surface, coastal and estuarine waters as part of the implementation of the EU Water Framework Directive. • To support Irish Water in the development of Drinking Water Protection Plans. Policy Objective E18: Groundwater Protection and Appropriate Assessment It is a Policy Objective to ensure the protection of the groundwater resources in and around the County and associated habitats and species in accordance with the Groundwater Directive 2006/118/EC and the European Communities Environmental Objectives (Groundwater) Regulations, 2010. In this regard, the Council will support the implementation of Irish Water's Water Safety Plans to protect sources of public water supply and their contributing catchment.

Topic	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including:	Existing Dún Laoghaire-Rathdown County Development Plan 2022-2028 measures, including:
	Jiiiiiiigateu	Objective GI3 – Deculverting:	Policy Objective EI16: Water Pollution
		It is an objective in accordance with the GI strategy of the	It is a Policy Objective to implement the provisions of water pollution abatement measures in accordance with national and EU Directives
		County Development Plan 2022 - 2028 to seek opportunities	and other legislative requirements in conjunction with other agencies as appropriate.
		where appropriate to open up the culverted elements of the	Policy Objective EI21: Catchment Flood Risk Assessment and Management (CFRAM)
		River Slang and reconnect the riverine habitats. Any such	It is a Policy Objective to assist the Office of Public Works (OPW) in the design and construction of flood relief schemes approved in
		proposals shall have regard to SFRA requirements and	the ten-year Programme of Investment in Flood Relief Measures following from the recommendations and outputs of the CFRAM for
		Appropriate Assessment requirements.	the Eastern District that are relevant for DLR.
		Policy DLAP32 - Sustainable Water Management:	Policy Objective E122: Flood Risk Management
		It is a policy to implement the main elements of the DLR GI	It is a Policy Objective to support, in cooperation with the OPW, the implementation of the EU Flood Risk Directive (20010/60/EC) on
		strategy in relation to water management including:	the assessment and management of flood risks, the Flood Risk Regulations (SI No 122 of 2010) and the Department of the
		 Reducing the rate, volume, and improve the quality of 	Environment, Heritage and Local Government and the Office of Public Works Guidelines on 'The Planning System and Flood Risk
		surface water runoff	Management' (2009) and relevant outputs of the Eastern District Catchment and Flood Risk Assessment and Management Study
		Managing runoff at -source through the use of	(ECFRAMS Study). Implementation of the above shall be via the policies and objectives, and all measures to mitigate identified flood
		infiltration systems	risk, including those recommended under part 3 (flood risk considerations) of the Justification Tests, in the Strategic Flood Risk
		Promoting local sustainable urban drainage systems	Assessment set out in Appendix 15 of this Plan.
1		(SuDS), 'Green Streets' and green roofs	
		Enabling SuDS to be located in the public realm Utilizing the river Sleng where possible as a patient.	
1		Utilizing the river Slang where possible as a natural foundations for a CL corridors.	
		foundations for a GI corridors Policy DLAP33- SuDS:	
1		It is policy to ensure that Sustainable Drainage Systems (SuDS)	
		is applied to any development in the DLAP area and that site	
		specific solutions to surface water drainage systems are	
		developed which meet the requirements of the Water	
		Framework Directive and associated River Basin Management	
		Plan. SuDS measures may include green roofs, permeable	
		paving, detention basins, infiltration systems etc.	
		Policy DLAP34 – Surface Waters Regulations:	
		It is a policy to ensure the implementation of the surface water	
		legislation Environmental Objectives (Surface Waters)	
		Regulations 2009 to ensure that development permitted would	
		not have an unacceptable impact on water quality including	
		surface waters, ground water, river corridors, estuarine waters,	
		bathing waters, coastal and transitional waters.	
		Development within the LAP area shall comply with the policies	
		and objectives of the County Development Plan relating to protection of existing water and drainage infrastructure.	
		Objective GI6– Re-wilding and Habitat Restoration /	
		Creation:	
		It is an objective to support the development and	
		implementation of re-wilding projects on appropriate sites	
		within the LAP and to promote the use of these sites for the	
		enhancement and preservation of Biodiversity on the Ticknock	
		to River Dodder Wildlife Corridor.	
		Objective GI7 – Slang Parkland SuDS measures:	
1		It is an objective that any areas of potential future linear	
1		parkland located along the Slang should look to incorporate	
1		Nature Based Solutions which include for biodiversity and	
		habitat restoration such as wetlands, linear swales, bio-	
1		retention areas, filter drains etc. as part of any potential future	
1		works.	
		Objective G18 Dundrum Library site & SuDS measures:	
		It is an objective that any future works to the Dundrum Library	
		site and existing brownfield site located to the rear shall look to incorporate as many SuDS elements as practical during the	
		initial design stage.	
	1	mittai acsign stage.	

Topic	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including:	Existing Dún Laoghaire-Rathdown County Development Plan 2022-2028 measures, including:
		Policy DLAP35 – Flood Risk Assessment:	
		It is policy to manage flood risk in the DLAP area in accordance	
		with the requirements of The Planning System and Flood Risk	
		Management Guidelines for Planning Authorities, DECLG and	
		OPW (2009) and Circular PL02/2014 (August 2014). and to	
		require all proposed developments to carry out a Site-Specific	
		Flood Risk Assessment that shall demonstrate compliance with:	
		The Planning System and Flood Risk Management,	
		Guidelines for Planning Authorities (DEHLG/OPW, 2009),	
		as may be revised and/or updated.	
		The prevailing Dún Laoghaire-Rathdown County	
		Development Plan.	
		Any SSFRA shall not be required to carry out a Plan-	
		Making Justification Test, given that this exercise was	
		already carried out at County Development Plan-level.	
		The SSFRA shall pay particular emphasis to site specific	
		mitigation measures and any necessary management	
		measures, as per Appendix B4 of the above 2009 National	
		Guidelines.	
		OSC18	
		Any redevelopment of the site shall:	
		Be guided by the Sequential Approach.	
		Carefully consider road/access and servicing	
		requirements to preclude flow from entering any	
		basement excavated below flood level.	
		Include a full emergency plan with access and egress to	
		Main Street.	
		Ensure that Finished Floor Levels (FFLs) are guided by	
		the residual risk related to spill over the road at Taney	
		Cross. Other FFLs should be higher than the Dundrum	
		Bypass and potential flood levels (see also FFL	
		requirements under Section 5.8.3 of the SFRA for the	
		County Development Plan 2022-2028).	
		Ensure that existing flow paths along the Dundrum	
		Bypass are maintained.	
		Be accompanied by a Site Specific Flood Risk Assessment	
		(SSFRA) that demonstrates that there is no impact in	
		flood risk outside the site boundary due to additional	
		development.	
		Policy DLAP40 – Water Framework Directive:	
		It is policy to facilitate compliance with the requirements of the	
		EU Water Framework Directive and any relevant legislation. In	
		this regard, the Council will facilitate compliance with the	
		relevant objectives and measures set out in the forthcoming	
		'River Basin Management Plan' (2022- 2028) and associated	
		Programme of Measures, where relevant. Applications for	
		development under the Plan must demonstrate that the	
		proposal for development would not adversely affect a water	
		body's ability to meet its objectives under the Water Framework	
		Directive, individually as a result of the proposed development	
		or cumulatively, in combination with other developments.	
		Policy DLAP41 – Groundwater:	
		It is policy to ensure the protection of groundwater resources	
		within the DLAP area and associated habitats and species in	
		accordance with the EU Groundwater Directive. All new	
		planning applications within the DLAP boundary shall have	<u> </u>

Topic	Potentially Significant	Local Area Plan measures, including:	port for the Dundrum Local Area Plan 2023 Existing Dún Laoghaire-Rathdown County Development Plan 2022-2028 measures, including:
	Adverse Effect, if		
	Unmitigated		
		regard to the likely impacts the proposed development may	
		have on groundwater resources.	
Air and	Potential conflict	Also refer to the overall approach to land use zoning and	Policy Objective CA1: National Climate Action Policy
Climatic	between development	sustainable mobility provided by the Plan.	It is a Policy Objective to support the implementation of International and National objectives on climate change including the 'Climate
Factors	under the Plan and	Policy DLAP5 Public Realm:	Action Plan 2021 Securing Our Future', the 'National Adaptation Framework' 2018, the 'National Energy and Climate Plan 2021-2030',
	aiming to reduce	It is policy that all significant new development provides	and take account of the 'Climate Action and Low Carbon Development (Amendment) Act 2021', and subsequent updates, other relevant
	carbon emissions in	connected, attractive, interesting and well used public realm	policy, Guidelines and legislation, that support the climate action policies included in the County Development Plan.
	line with local, national	and open spaces using place making and urban design	Policy Objective CA2: Regional Climate Action
	and European environmental	principles, creating a pedestrian centred environment with active, inviting public spaces and parks.	It is a Policy Objective to work closely with the Eastern Midland Regional Authority (EMRA) the Dublin Metropolitan Climate Action Regional Office (Dublin CARO), City of Dublin Energy Management Agency (Codema) and the Sustainable Energy Authority of Ireland
	objectives.	Policy DLAP6 Public Realm Rebalancing:	(SEAI) to achieve the climate action policies and objectives set out in the Eastern and Midland Region Spatial and Economic Strategy
	Potential conflicts	It is policy that that there is a rebalance of available space	(consistent with RPO 3.1, 36, 7.4, 7.30, 7.31, 7.32, 7.33, 7.35, 7.38, 7.40, 7.42, 7.43, 7.7 of the RSES).
	between transport	toward pedestrians, cyclists and urban greening.	Policy Objective CA3: Measuring Greenhouse Gas Impacts
	emissions, including	Policy DLAP7 - Provision of SNI uses and delivery of the	It is a Policy Objective that spatial and infrastructure planning are consistent with climate mitigation and adaptation objectives. When
	those from cars, and	ten minute neighbourhood:	it is available, the Council will be informed by the work led by the Eastern and Midland Regional Assembly to develop a methodology
	air quality.	It is a policy to support the delivery of sufficient SNI uses	for quantifying the GHG impacts of spatial planning policies, (QGasSP, an ESPON EU research programme) and the forthcoming
	 Potential conflicts 	including community and educational uses that will be required	Development Plan Guidelines or other national guidance as appropriate. The Council will quantify the GHG impacts for this County
	between increased	to ensure sustainable living - in line with ten minute	Development Plan when EMRA guidelines become available and also ensure the Development Plan is consistent with the approach to
	frequency of noise	neighbourhood concept - for existing and future residents of	climate action recommended in any forthcoming revised Section 28 Development Plan Guidelines or other relevant guidelines and if
	emissions and	the Dundrum LAP area. Objective DBP4 – Pedestrian and Cyclist Access:	necessary, vary the development plan "(Consistent with NPO 54 of the NPF and RPO 3.6 of the RSES). Policy Objective CA4: Dún Laoghaire Rathdown County Council Climate Change Action Plan 2019-2024 (DLR CCAP)
	protection of sensitive receptors.	It is an objective to support and facilitate enhanced pedestrian	It is a Policy Objective to implement and take account of the Dún Laoghaire-Rathdown County Council Climate Change Action Plan
	Potential conflicts with	and cyclist access to Dundrum Business Park, including through	2019 - 2024 (DLR CCAP), to take account of the 'Climate Action and Low Carbon Development (Amendment) Act 2021', and subsequent
	climate adaptation	the provision of a new active travel link from Beechmount	updates of both and to transition to a climate resilient low carbon County. (Consistent with SO8 of the NPF, RPO 7.32, 7.33 of the
	measures including	Drive.	RSES).
	those relating to flood	Objective DBP5 – Cycle Infrastructure:	Policy Objective CA5: Energy Performance in Buildings
	risk management.	It is an objective to support the provision of additional cycle	It is a Policy Objective to support high levels of energy conservation, energy efficiency and the use of renewable energy sources in
		infrastructure as part of any upgrade or redevelopment works	existing and new buildings, including retro fitting of energy efficiency measures in the existing building stock.
		within Dundrum Business Park, including dedicated secure	Policy Objective CA6: Retrofit and Reuse of Buildings
		cycle parking, lockers and shower facilities.	It is a Policy Objective to require the retrofitting and reuse of existing buildings rather than their demolition and reconstruction where
		Objective EMP2 – Luas to Airfield: It is an objective to support the provision of sufficient	possible recognising the embodied energy in existing buildings and thereby reducing the overall embodied energy in construction as set out in the Urban Design Manual (Department of Environment Heritage and Local Government, 2009). (Consistent with RPO 7.40
		wayfinding signage and a comfortable pedestrian environment	and 7.41 of the RSES).
		between Balally Luas stop and Airfield Estate.	Policy Objective CA7: Construction Materials
		Policy DLAP24 – Connected Network:	It is a Policy Objective to support the use of structural materials in the construction industry that have low to zero embodied energy
		It is policy to provide attractive high-quality inclusive and	and CO2 emissions. (Consistent with the RPO 7.41 of the RSES)
		connected walking and cycling networks with direct routes to	Policy Objective CA8: Sustainability in Adaptable Design
		local destinations and public transport hubs.	It is a Policy Objective to promote sustainable approaches to the improvement of standards for habitable accommodation, by allowing
		Policy DLAP25 – 10-Minute Concept:	dwellings to be flexible, accessible and adaptable in their spatial layout and design.
		It is policy to promote the '10-minute' settlement concept in	Policy Objective CA9: Radon Gas
		Dundrum with reduced walking times to essential daily services. Policy DLAP26 - Modal Shift:	It is a Policy Objective, in partnership with other relevant agencies, to promote best practice in the implementation of radon prevention measures.
		It is policy to provide an environment which supports moving	Policy Objective CA10: Renewable Energy
		people from the private car to more sustainable modes. This	It is a Policy Objective to support County, Regional, National and International initiatives and pilot schemes to encourage the
		can be done by way of further developing the network where	development and use of renewable energy sources, including the SEAI Sustainable Energy Community initiatives, as a means of
		a range of facilities and services are accessible in a short	transitioning to a low carbon climate resilient County in line with national renewable energy targets.
		walking and cycling timeframe from homes, or are accessible	Policy Objective CA11: Onshore and Offshore Wind Energy and Wave Energy
		by high quality public transport located within a short walk from	It is a Policy Objective to support in conjunction with other relevant agencies, wind energy initiatives, both on-shore and offshore, and
		home.	wave energy, and onshore grid connections and reinforcements to facilitate offshore renewable energy development when these are
		Policy DLAP27 – Improved Environment:	undertaken in an environmentally acceptable manner. (Consistent with NSO 8 and NPO 42 of the NPF and RPO 7.36 and 10.24 of the
		It is policy to seek to improve the air quality and pedestrian	RSES).
		environment along the streets through Dundrum village including, Main St, Sandyford Road, Kilmacud Rd Upper and	Policy Objective CA12: Small-Scale Wind Energy Schemes It is a Policy Objective to encourage small-scale wind energy developments and support small community-based proposals provided
		Ballinteer Road as well as at school zones and along the main	they do not negatively impact upon the environmental quality or amenity of the area, as a renewable energy resource which can
		pedestrian access routes immediately adjacent to the school.	contribute to the transition to a low carbon climate resilient County.
		podestinan decess reaces immediately adjacent to the scriber.	Some Battle to the distribution to a low outport offinition obtains.

Topic	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including:	Existing Dún Laoghaire-Rathdown County Development Plan 2022-2028 measures, including:
		Policy DLAP28 – Employment Access: It is policy to support improved economic competitiveness of Dundrum Major Town Centre by improving access for all. Policy DLAP29 – Vehicle Reduction: It is policy to reduce the need for vehicular travel within Dundrum by enhancing the integration of land-use and transport. Policy DLAP30 – Safe Schools: It is policy to provide safe access to schools via walking/cycling, safe front of school environment and to support the Safe Routes to School initiative. Objective T1 – Retention & Extension of existing One-Way Traffic Layout It is an objective to: Retain the existing one-way northbound traffic layout on Main St/Sandyford Rd and to extend it out to the junction of Main St with Dundrum bypass Retain the existing one-way westbound traffic layout on Kilmacud Rd Upper to Dundrum Cross (right turn only onto Main Street). These layouts shall be transitioned to a permanent scheme with associated public realm improvements. Objective T2 Retention & Extension of the Southbound Cycle Lane It is an objective to retain the existing southbound cycle lane on Main St/Sandyford Rd. The layout shall be transitioned to a permanent scheme with associated public realm improvements. Objective T3 – DLR Connector: It is an objective to support the delivery of the DLR Connector scheme elements which fall with the LAP. The scheme will provide safe and attractive cycling facilities connecting surrounding residential areas to Dundrum as well as to both Holy Cross and Taney parish primary schools while also facilitating the safe passage of cyclists travelling on the wider cycle network. Objective T4 – Safe Routes to School It is an objective to support the delivery of the Safe Routes to School scheme at Holy Cross Primary School on Kilmacud Road Upper, which will provide a safer environment for children travelling to school on foot or by bicycle / scooter. Objective T5 Taney Cross Primary School on Kilmacud Road Upper, which will provide a safer environment for pedestrians, cyclists and public transport u	Policy Objective CA13: Solar Energy Infrastructure It is a Policy Objective to encourage and support the development of solar energy infrastructure, including photo voltaic (PV) and solar thermal and seasonal storage facilities infrastructure in appropriate locations, as a renewable energy resource which can contribute to the transition to a low carbon climate resilient County. It is also a policy objective to support ireland's renewable energy commitments by facilitating utility scale PV installations for the production of electricity provided they do not negatively impact upon the environmental quality, amenity or heritage of the area. Policy Objective CA14: Energy Storage Systems It is Policy Objective to Support the use of efficient energy storage systems and infrastructure that supports energy efficiency and reusable energy system optimization, in accordance with proper planning and sustainable development when these are undertaken in an environmentally acceptable manner. Policy Objective CA15: District Heacting It is a Policy Objective OA15: District Heacting It is a Policy Objective OA15: District Heacting Authority will support the development of a council wide District Heat policy following on from the forthcoming National Policy Framework for District Heat (Consistent with RPD 7.38 of the RESS) Policy Objective CA16: Low Emission Vehicles It is a Policy Objective to support and facilitate the rollout of alternative low emission fuel infrastructure through the Development Management process, prioritising electric vehicle Interastructure. Policy Objective to Support, the Government's Electric Transport Programme by progressively electrifying our mobility systems by facilitating the rollout of Electric Powered Vehicle Recharging Parking Bays across the County and on public codes and others. Policy Objective CA16: Comport and facilities of the Europer Support Support Supports the development shall include urban greening - as an essential accompanying policy to compact growth - which supports the prov
		Policy DLAP30 – Safe Schools: It is policy to provide safe access to schools via walking/cycling, safe front of school environment and to support the Safe Routes to School initiative. Objective T1 – Retention & Extension of existing One-Way Traffic Layout It is an objective to: • Retain the existing one-way northbound traffic layout on Main St/Sandyford Rd and to extend it out to the junction of Main St with Dundrum bypass • Retain the existing one-way westbound traffic layout on Kilmacud Rd Upper to Dundrum Cross (right turn only onto Main Street). These layouts shall be transitioned to a permanent scheme with associated public realm improvements. Objective T2 Retention & Extension of the Southbound Cycle Lane It is an objective to retain the existing southbound cycle lane on Main St/Sandyford Rd. The layout shall be transitioned to a permanent scheme with associated public realm improvements. Objective T3 – DLR Connector: It is an objective to support the delivery of the DLR Connector scheme elements which fall with the LAP. The scheme will provide safe and attractive cycling facilities connecting surrounding residential areas to Dundrum as well as to both Holy Cross and Taney parish primary schools while also facilitating the safe passage of cyclists travelling on the wider cycle network. Objective T4 – Safe Routes to School It is an objective to support the delivery of the Safe Routes to School scheme at Holy Cross Primary School on Kilmacud Road Upper, which will provide a safer environment for children travelling to school on foot or by bicycle / scooter. Objective T5 Taney Cross and Bus – Luas Interchange upgrade: It is an objective to upgrade Taney Cross junction and environs, including the Bus – Luas Interchange, to provide a safe, efficient and attractive environment for pedestrians, cyclists and public transport users. Any proposal shall positively address the public realm area in front of the existing Carnegie	It is Policy Objective to support the use of efficient energy storage systems and infrastructure that supports energy eff reusable energy system optimization, in accordance with proper planning and sustainable development when these are un an environmentally acceptable manner. Policy Objective CA15: District Heating It is a Policy Objective to support the development of district heat networks and the utilisation of waste heat recovery in the a renewable or low energy resource which can contribute to the transition to a low carbon climate resilient County. The Authority will support the development of a Council wide District Heat policy following on from the forthcoming Nati Framework for District Heat. (Consistent with RPO 7.38 of the RSES) Policy Objective CA16: Low Emission Vehicles It is a Policy Objective to support and facilitate the rollout of alternative low emission fuel infrastructure through the Definfastructure. Policy Objective CA17: Electric Vehicles It is a Policy Objective to support, the Government's Electric Transport Programme by progressively electrifying our mobil by facilitating the rollout of Electric Powered Vehicle Recharging Parking Bays across the County and on public roads and ot location. The provision of e-bike chargers will be supported subject to the availability of Funding. (Consistent with NSO 4 and RPO 7.42 of RSES) Policy Objective CA18: Urban Greening It is a Policy Objective to retain and promote urban greening - as an essential accompanying policy to compact growth - wl supports the health and wellbeing of the living and working population, building resilience to climate change whilst ensurin placemaking. Significant developments shall include urban greening as a fundamental element of the site and building desi incorporating measures such as high quality biodiverse landscaping (including tree planting), nature based solutions to SUD providing attractive routes and facilities for the pedestrian and cyclist (Consistent with RPO 7.6, 7.22, 7.23, 9.10 of the RSE Policy
		Improvements It is an objective to develop a Mobility Hub, at the Dundrum Bus – Luas Interchange and to also improve accessibility to Dundrum Luas Station, including provision for direct access to	

Topic	Potentially Significant	Local Area Plan measures, including:	Existing Dún Laoghaire-Rathdown County Development Plan 2022-2028 measures, including:
	Adverse Effect, if		
	Unmitigated	Objective T7 Taney Cross and Environs Cycle Facilities	
		It is an objective to support of the delivery of the Taney Rd to	
		N11 cycle scheme, and to progress a network of segregated	
		cycle facilities and improved pedestrian facilities for Taney	
		Cross and Environs to provide safe and efficient facilities for	
		pedestrians and cyclists and to support any safe Routes to	
		Schools initiatives that may be brought forward for nearby	
		schools located in the vicinity of Taney Cross and Environs.	
		Objective T8: North Sandyford Road	
		It is an objective to:	
		Provide a two-way segregated cycle track on Sandyford	
		Road from the junction with Overend Avenue to the	
		entrance to the Riversdale Apartments.	
		Reduce carriageway widths, widen footpaths and	
		provide public realm improvements to reinforce North	
		Sandyford Road's place as a town centre street and	
		encourage slower vehicle speeds.	
		Create a school zone and safe access route for	
		pedestrians and cyclists to Holy Cross National School	
		via the Dom Marmion car park.	
		Objective T9 – Sydenham Road Upgrades:	
		It is an objective to implement a one-way southbound traffic	
		layout on Sydenham Road with the reallocation of road space	
		to facilitate a two-way segregated cycle track along with	
		general footpath improvements, creating a safer environment	
		for pedestrians and cyclists and for children travelling to school.	
		Objective T10 – Dundrum Bypass Cycle Infrastructure:	
		It is an objective to provide a two-way segregated cycle track	
		along the western side of Dundrum Bypass.	
		Objective T11 – Pedestrian and Cycle Connectivity	
		across Dundrum Bypass: It is an objective to provide:	
		A new pedestrian and cycle crossing at an appropriate	
		location on the southern end of the Bypass to allow access	
		from adjacent residential areas direct to the Dundrum	
		Shopping Centre access routes and bus stops located on	
		the eastern side of the Bypass.	
		New accessible pedestrian and cycle crossings between	
		Sweetmount Park and the Old Dundrum Shopping Centre	
		redevelopment site (Both at grade and a bridge crossing	
		may be required to achieve full accessibility – see also	
		OSC3 in chapter 2).	
		Objective T12 Vehicular Access to Parking from	
		Dundrum Bypass	
		It is an objective to require future vehicular access to parking	
		within the Old Dundrum Shopping Centre redevelopment site,	
		to be solely from Dundrum Bypass.	
		Objective T13 Disabled & Age Friendly Car Parking:	
		It is an objective to ensure adequate provision of both Disabled	
		and Age Friendly car parking spaces at appropriate locations	
		within the town.	
		Objective T14 Cycle Parking Facilities:	
		It is an objective to ensure that secure, off – street, publicly	
		accessible cycle parking facilities, together with charging	
		facilities for eBikes, are provided as part of any significant new	
		developments in Dundrum or as part of any significant change	

Topic	Potentially Significant	Local Area Plan measures, including:	Existing Dún Laoghaire-Rathdown County Development Plan 2022-2028 measures, including:
	Adverse Effect, if Unmitigated		
		of use or redevelopment proposals in the town. In addition, it	
		is objective to ensure the continued provision of on-street cycle	
		parking at appropriate locations and to ensure that all cycle	
		parking, both on and off street adequately provides for outsized	
		cycles such as cargo bikes.	
		Objective T15 – Wyckham Way Roundabout Upgrades: It is an objective to upgrade the existing roundabout on the	
		Wyckham Way at the junction with Dundrum Bypass to a	
		signalised junction providing a safer and more efficient	
		environment for pedestrians and cyclists, while also allowing	
		better control of traffic movements.	
		Objective T16 Sandyford Road/Wyckham	
		Way/Overend Avenue Junction Upgrade:	
		It is an objective to upgrade the existing signalised junction to	
		provide a safer environment for pedestrians and cyclists, better	
		catering for all modes of travel.	
		Objective T17 Overend Avenue Cycle Facilities	
		Upgrade: It is an objective to upgrade the existing cycle infrastructure on	
		Overend Avenue, including:	
		A two-way segregated cycle track on the western side from	
		the junction with Sandyford Road to the Sydenham Villas	
		access point;	
		A two-way segregated cycle track connecting the	
		Sandyford Road junction to Balally Luas station; and	
		Upgrade of remaining cycle lanes on Overend Avenue to	
		permanent segregated facilities.	
		T18 Balally Luas Mobility Hub:	
		It is an objective to develop a Mobility Hub, at Balally Luas	
		station in order to promote interchange between modes including cycling and eMobility.	
		Objective T19 – Dundrum Road – Neighbourhood	
		Street:	
		It is an objective to transition Dundrum Road to a	
		neighbourhood street, using traffic calming and public realm	
		improvements to create a safer, more accessible and attractive	
		environment for local residents.	
		Objective T20 – Windy Arbour Neighbourhood Centre:	
		It is an objective to enhance the existing neighbourhood centre	
		on Dundrum Road at Windy Arbour (located immediately north	
		and south of Mulvey Park) and to strengthen the area, as a village centre and focal point for the local community, through	
		the delivery of an enhanced public realm, urban greening,	
		traffic calming and improved pedestrian and cycle accessibility	
		(As this policy objective focuses on transport see also Objective	
		NC3 chapter 6).	
		Objective T21 - Dodder to Dundrum Pedestrian and	
		Cycle Route:	
		It is an objective of the Local Area Plan, to create a new	
		pedestrian and cycle route connecting the Dodder Greenway to	
		Dundrum Major Town Centre via the site of the former	
		Dundrum Central Mental Hospital. Objective T22 Lecalized Roundary Set back:	
		Objective T22 – Localised Boundary Set-back: It is an objective of the Plan to seek the set-back of roadside	
		boundaries at the pinch points illustrated in figure 4.13 to	
	1	poundanes at the pinch points illustrated in rigure 4.15 to	

Topic	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including:	Existing Dún Laoghaire-Rathdown County Development Plan 2022-2028 measures, including:
		facilitate the delivery of improved pedestrian and cycle infrastructure. Objective T23 – Former Central Mental Hospital site: It is an objective to require the development of a high quality pedestrian and cycle facility through the site of the former Central Mental Hospital, to form part of the proposed Dodder to Dundrum cycle route. Objective T24 – St. Columbanus' Road Safe School Zone: It is an objective of the LAP to progress the transition of St Columbannus' Road to a "Safe school zone" in line with NTA "Safe Routes to School" Design Guidance.	
Material Assets	Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity ensures the mitigation of potential conflicts). Failure to adequately treat surface water run-off that is discharged to water bodies (water services infrastructure and capacity ensures the mitigation of potential conflicts). Failure to comply with drinking water regulations and serve new development with adequate drinking water (water services infrastructure and capacity ensures the mitigation of potential conflicts). Increases in waste levels. Potential impacts upon public assets and infrastructure. Interactions between agricultural waste and soil, water, biodiversity and human health — including as a result of emissions of ammonia from agricultural activities (e.g. manure handling, storage and spreading) and the	Also refer to measures under other environmental components including Population and Human Health, Cultural Policy DLAP36 – Sustainable Energy Use: It is a policy to: Support the initiatives where relevant of any Sustainable Energy Communities within Dundrum. Support initiatives where relevant which improve sustainable energy use within the Plan lands. Policy DLAP37 – Renewable Energy Use: It is a policy to: encourage and support the development of solar energy infrastructure, including photo voltaic (PV) in appropriate locations support the development of district heat networks and the utilisation of waste heat recovery. Policy DLAP38 – Supporting Uisce Éireann: It is policy to support Uisce Eireann in the provision of adequate water and waste water treatment infrastructure to serve the needs of the existing and future population of the Plan area and ensuring that such infrastructure is provided prior to, or in tandem with, new development. Policy DLAP39 – Wastewater Treatment: It is policy to facilitate Uisce Eireann in ensuring that all wastewater generated is collected, treated and discharged after treatment in a safe and sustainable manner, having regard to the standards and requirements set out in EU and national legislation and guidance.	Also refer to measures under other environmental components including Population and Human Health, Cultural Heritage, Soil, Water, Air, various Land Use provisions. Policy Objective T26: Traffic and Transport Assessments and Road Safety Audits It is a Policy Objective to require Traffic and Transport Assessments and/or Road Safety Audits for major developments – in accordance with the TIIs 'Traffic and Transport Assessment Guidelines' (2014) - to assess the traffic impacts on the surrounding road network and provide measures to mitigate any adverse impacts - all in accordance with best practice guidelines. Policy Objective 129: Traffic Management It is a Policy Objective to introduce Traffic Management Schemes on particular roads and in appropriate areas throughout the County to reduce vehicle speeds to an acceptable level and to reduce the potential for traffic congestion and associated vehicular emissions in urban areas. Policy Objective 11: Sustainable Management of Water It is a Policy Objective to work with Irish Water: * To ensure the efficient and sustainable use and development of water resources and water services infrastructure in order to manage and conserve water in a manner that supports climate action, the circular economy, a healthy society and protection of the environment. (Consistent with NSO 9 of the NPF, RSO 7, RPO 10.1 of the RSES) * To continue the development and improvement of the water supply and wastewater systems throughout Dun Laoghaire-Rathdown in order to meet the anticipated water and wastewater requirements of the County. * To ensure facilities comply with the Water Framework Directive and the River Basin Management Plan or any updated version of the document, Poliution Reduction Programmes for Designated Shellfish Areas, the Urban Waste Water Treatment Directive and the Habitats Directive. * Policy Objective E12: Trish Water Enabling Policies * Irish Water's Plans and Programmes It is a Policy Objective In conjunction with the Eastern and Midland Regional Authority,

Topic	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including:	Existing Dún Laoghaire-Rathdown County Development Plan 2022-2028 measures, including:
	Adverse Effect, if Unmitigated production of secondary inorganic particulate matter.		It is a Policy Objective to prohibit multiple dwelling units discharging to communal wastewater treatment systems. Consideration of single dwelling domestic wastewater treatment systems in those areas not served by a public foul sewerage system will be subject to full compilance with the EPA Code of Practice Domestic Wastewater Treatment Systems (Population Equivalent 5 10) (March 2021), as may be amended or updated. Consideration of non-domestic wastewater treatment systems in those areas not served by a public foul sewerage system will be subject to full compilance with EPA Wastewater Treatment Manuals (Treatment Systems for Small Communities, Business, Leisure Centress and Hotels).¹ Wastewater treatment systems shall be located entirely within the site boundary. The Council will liaise with trish Water to ensure compilance with existing licenses, the Urban Waste water Directive and the EU Habitats Directive. See section 12.10.3 Waste Water Treatment Systems for detailed requirements. Policy Objective E14: Water Drainage Systems It is a Policy Objective 16.1: Sustainable Drainage Systems It is a Policy Objective E16: Sustainable Drainage Systems It is a Policy Objective E16: Sustainable Drainage Systems It is a Policy Objective E17: Water Supply and Wastewater treatment and Appropriate Assessment to ensure there are no likely significant effects on the literagity, defined by the structure and function, of any Natura 2000 sites and that the requirements of Article 6 of the EU Habitats Directive are met. (Consistent with RPO 10.7 of the RSS). Policy Objective E17: Water Supply and Wastewater treatment and Appropriate Assessment to ensure there are no likely significant effects on the literagity, defined by the structure and function, of any Natura 2000 sites and that the requirements of Article 6 of the EU Habitats Directive are met. (Consistent with RPO 10.7 of the RSS). Policy Objective E17: Water with all elevelopments prepare a Drainage Impact Assessment that meets the requirements of the Councils
			subject to full compliance with EPA Wastewater Treatment Manuals ('Treatment Systems for Small Communities, Business, Leisure Centres and Hotels').

Topic	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including:	Existing Dún Laoghaire-Rathdown County Development Plan 2022-2028 measures, including:
	S.imagaeu .		In areas of high to extreme groundwater vulnerability (this includes areas in Rathmichael, Kiltiernan and Glencullen and may include other areas in the County), further hydrogeological assessment shall be undertaken by a competent and experienced hydrogeologist, which assessment should demonstrate to the satisfaction of Diu Laoghaine-Rathdown County Council that the proposed treatment system serving the proposed discharge be greater than 5m3/d, a discharge licence to groundwater quality. Should the proposed discharge be greater than 5m3/d, a discharge licence to groundwater will be required and a successful assimilative capacity assessment will have to be undertaken in line with the EPA (2011) "Guidance on the Authorisation of Discharges to Groundwater". The tier of assessment (i.e. 2 or 3) required will be dependent on the potential risk of impact and the proposed daily discharge. Should a discharge to surface water be considered or should surface water be considered as a receptor at risk, the assimilative capacity should follow the technical rules established in the "Guidance, Procedures and Training on the Licensing of Discharges to Surface Waters" (Water Services National Training Group, 2011)". Information on Groundwater data mapping and Groundwater protection responses are available on the GSI website (https://www.gsi.le) and Appendix E of the EPA Code of Practice Domestic Wastewater Treatment Systems (Population Equivalent ≤ 10) (March 2021) and should be used as a resource tool. Wastewater treatment systems shall be located entirely within the site boundary. The Council will liaise with irish Water to ensure compliance with existing licenses, the Urban Waste water Directive and the EU Habitats Directive. Policy Objective E111: Resource Management It is a Policy Objective to implement the Eastern-Midlands Region Waste Management Plan 2015-2021 and subsequent plans, in supporting the transition from a waste management economy towards a circular economy, to enhance employment and increase the value
Cultural Heritage	Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities.	Policy DLAP48 – Historic Character It is Council Policy to ensure the protection of the historical character of Dundrum and ensure that any future development / redevelopment is carried out in a manner sympathetic to its special character thus ensuring that the distinct character and intrinsic heritage qualities of the Dundrum area are recognised. Policy DLAP49 – Built Heritage It is Policy to conserve, protect and enhance (as appropriate) the built heritage of Dundrum, including the Architectural Conservation Areas, Protected Structures and attendant	Various provisions under Chapter 6: Enterprise and Employment Archaeological Heritage Policy Objective HER1: Protection of Archaeological Heritage It is a Policy Objective to protect archaeological sites, National Monuments (and their settings), which have been identified in the Record of Monuments and Places and, where feasible, appropriate and applicable to promote access to and signposting of such sites and monuments. Policy Objective HER2: Protection of Archaeological Material in Situ It is a Policy Objective to seek the preservation in situ (or where this is not possible or appropriate, as a minimum, preservation by record) of all archaeological monuments included in the Record of Monuments and Places, and of previously unknown sites, features and objects of archaeological interest that become revealed through development activity. In respect of decision making on

Topic	Potentially Significant Local Area Plan measures, including: Adverse Effect, if		Existing Dún Laoghaire-Rathdown County Development Plan 2022-2028 measures, including:		
	Unmitigated				
		grounds, in accordance with best conservation practice and	development proposals affecting sites listed in the Record of Monuments and Places, the Council will have regard to the advice and/		
		policy objectives set out in the County Development Plan, 2022-	or recommendations of the Department of Culture, Heritage and the Gaeltacht (DCHG).		
		2028. Policy DLAP50 – Character	Policy Objective HER3: Protection of Historic Towns It is a Policy Objective to promote and protect the Historic Town of Dalkey as identified by the Department of Culture, Heritage and		
		It is Policy to seek to achieve an interesting and vibrant mix of	the Gaeltacht (DCHG) (consistent with RPO 9.27 of the RSES).		
		the old and the new, to enhance the sense of place, character	Policy Objective HER5: Historic Burial Grounds		
		and identity of the Dundrum area.	It is a Policy Objective to protect historical and/or closed burial grounds within the County and encourage their maintenance in		
		Policy DLAP51 – High Quality Architecture	accordance with good conservation practice and to promote access to such sites where possible.		
		It is Policy to support the development of appropriate,	Policy Objective HER6: Underwater Archaeology		
		architecturally significant development in Dundrum that has	It is a Policy Objective for all developments, which have potential to impact on riverine, intertidal and sub-tidal environments to		
		regard to Dundrum's historical past character but contributes new and exciting elements.	require an archaeological assessment prior to works being carried out. Architectural Heritage		
		Policy DLAP52 – Alterations to Protected Structures	Policy Objective HER7: Record of Protected Structures		
		It is Policy to promote proposals that improve, alter, extend or	It is a Policy Objective to include those structures that are considered in the opinion of the Planning Authority to be of special		
		change the use of Protected Structures that result in a viable	architectural, historical, archaeological, artistic, cultural, scientific, technical or social interest in the Record of Protected Structures.		
		modern use, subject to appropriate design, materials and	Policy Objective HER8: Work to Protected Structures		
		construction methods. All such proposals must ensure that all	It is a Policy Objective to:		
		works are carried out under supervision of a qualified	i. Protect structures included on the RPS from any works that would negatively impact their special character and appearance;		
		professional with specialised conservation expertise and will be subject to assessment by the Council's Conservation Officer(s).	ii. Ensure that any development proposals to Protected Structures, their curtilage and setting shall have regard to the 'Architectural Heritage Protection Guidelines for Planning Authorities' published by the Department of the Arts, Heritage and the Gaeltacht;		
		Policy DLAP53 – Reuse of Protected Structures	iii. Ensure that all works are carried out under supervision of a qualified professional with specialised conservation expertise;		
		It is a Policy to consider positively the change of use of	iv. Ensure that any development, modification, alteration, or extension affecting a Protected Structure and/or its setting is sensitively		
		protected structures where it can be shown that the structure,	sited and designed, and is appropriate in terms of the proposed scale, mass, height, density, layout, and materials;		
		character, appearance and setting will not be adversely	v. Ensure that the form and structural integrity of the Protected Structure is retained in any redevelopment and that the relationship		
	affected and where its reuse for an alternative purpose is		between the Protected Structure and any complex of adjoining buildings, designed landscape features, or views and vistas from		
		necessary to maintain the viability of the structure and to			
		enable its upkeep. Policy DLAP54 – Architectural Conservation Areas	vi. Respect the special interest of the interior, including its plan form, hierarchy of spaces, architectural detail, fixtures and fittings and materials;		
		It is Policy to ensure the design of any development in	vii. Ensure that new and adapted uses are compatible with the character and special interest of the Protected Structure;		
		Architectural Conservation Areas, including any changes of	viii. Protect the curtilage of protected structures and to refuse planning permission for inappropriate development within the curtilage		
		use of an existing building, should preserve and / or enhance	and attendant grounds that would adversely impact on the special character of the Protected Structure;		
		the character and appearance of the Architectural	ix. Protect and retain important elements of built heritage including historic gardens, stone walls, entrance gates and piers and any		
		Conservation Area as a whole. Policy DLAP55 – Dundrum ACA(s):	other associated curtilage features; x. Ensure historic landscapes and gardens associated with Protected Structures are protected from inappropriate development		
		It is policy to protect, conserve and where appropriate,	(consistent with NPO 17 of the NPF and RPO 9.30 of the RSES).		
		enhance the ACA(s) in Dundrum. Any proposal for development	Policy Objective HER9: Protected Structures Applications and Documentation		
		within, or adjacent to, the ACA shall:	It is a Policy Objective to require all planning applications relating to Protected Structures to contain the appropriate level of		
		Respect the scale and form of existing structures within	documentation in accordance with Article 23 (2) of the Planning Regulations and Chapter 6 and Appendix B of the 'Architectural		
		the ACA in terms of proportion, scale and materials and	Heritage Protection Guidelines for Planning Authorities', or any variation thereof.		
		finishes, particularly along street frontages; Seek where possible and appropriate to contribute to or	Policy Objective HER10: Protected Structures and Building Regulations It is a Policy Objective to protect the character and special interest of Protected Structures when considering or carrying out		
		enhance the streetscape of the ACA (with particular	interventions to comply with the requirements of the Building Regulations - with particular reference to Part B and Part M.		
		reference to Main Street);	Policy Objective HER11: Energy Efficiency of Protected Structures		
		Seek to retain/ reinstate exterior features which	It is a Policy Objective to have regard to the Department of Environment, Heritage and Local Government's publication on 'Energy		
		contribute or enhance the character and streetscape of	Efficiency in Traditional Buildings' (2010) and the Irish Standard IS EN 16883:2017 'Conservation of cultural heritage - guidelines for		
		the ACA such as shop fronts, sash windows, gutters and	improving the energy performance of historic buildings' (2017) and any future advisory documents in assessing proposed works on		
		down pipes, decorative plasterwork etc;	Protected Structures. Policy Objective HED13: National Inventory of Architectural Heritage (NIAH)		
		Ensure priority is given to the pedestrian, to inclusive access, and to facilitating the improvement of the	Policy Objective HER12: National Inventory of Architectural Heritage (NIAH) It is a Policy Objective to review and update the RPS on foot of any Ministerial recommendations. The 'Ministerial Recommendations',		
		quality of the public realm.	made under Section 53 of the Planning Acts, will be taken into account when the Planning Authority is considering proposals for		
		Ensure any signage is sensitive to the buildings and	development that would affect the historic or architectural interest of these structures.		
		streetscape (see also chapter 2 for urban design policy	Policy Objective HER13: Architectural Conservation Areas		
		and objectives and specific objectives relating to the old	It is a Policy Objective to:		
		shopping centre site and the "Village" character area.)	i. Protect the character and special interest of an area which has been designated as an ACA. Please refer to Appendix 4 for a full list of ACAs.		
			OF NORS.		

Topic	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including:	Existing Dún Laoghaire-Rathdown County Development Plan 2022-2028 measures, including:
	Unmitigated	Policy DLAP56 – Design Rationale: It is policy to require a design rationale to accompany all significant proposals for development within/proximate to ACAs within the DLAP area, which demonstrates how the proposed development supports and enhances the character and architectural quality of the ACA. This design rationale should address the design process for the development and how the proposal will integrate with the historic environment with reference to the following: Urban grain; Urban structure; Density and mix; Scale; Materials and detailing; Landscape; Views and landmarks; and Historical development.	III. Ensure that all development proposals within an ACA be appropriate to the character of the area having regard to the Character Appraisals for each area. III. Ensure that any new development or alteration of a building within an ACA or immediately adjoining an ACA is appropriate in terms of the proposed design, including scale, height, mass, density, building lines and materials. In Seek a high quality, sensitive design for any new development(s) that are complimentary and/or sympathetic to their context and scale whilst simultaneously encouraging contemporary design which is in harmony with the area. Direction can also be taken from using traditional forms that are then expressed in a contemporary manner rather than a replica of a historic building. I. Ensure street furniture is kept to a minimum, is of good design and any redundant street furniture removed. I. Seek the retention of all features that contribute to the character of an ACA including boundary walls, railings, soft landscaping, traditional paving and street furniture. Policy Objective HER15: Demolition within an ACA It is a Policy Objective HER16: Demolition within an ACA are retained and restored. It is policy Objective HER16: Public Realm and Public Utility works within an ACA It is a Policy Objective HER16: Public Realm and Public Utility works within an ACA. It is not are retained and restored. It is a Policy Objective HER16: Public Realm and Public Utility works within an ACA. Policy Objective HER16: Public Realm and Public Utility works within an ACA. It is a Policy Objective the Control of an ACA. Policy Objective HER16: Public Realm and Public Utility works within an ACA. Policy Objective HER17: Candidate Architectural Conservation Areas. It is a Policy Objective HER17: Candidate Architectural Conservation Areas are accountable to the distinctive character of the area. III. Ensure that works to the public realm such as the provision of traffic control measures, street furniture, materials and finishes have regard to the

	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including:	Existing Dún Laoghaire-Rathdown County Development Plan 2022-2028 measures, including:
			Policy Objective HER22: Protection of Historic Street Furniture and Public Realm It is a Policy Objective to: i. Preserve the retention of historic items of street furniture where these contribute to the character of the area including items of a vernacular or local significance. ii. Promote high standards for design, materials and workmanship in public realm improvements within areas of historic character. Policy Objective HER23: Industrial Heritage It is a Policy Objective to: i. Have regard to those items identified in the Industrial Heritage Survey listed in Appendix 4 when assessing any development proposals. ii. Identify further sites of industrial heritage significance with a view to assessing them for inclusion in the Record of Protected Structures. Policy Objective HER25: Heritage Plan It is a Policy Objective to support the preparation and implementation of the third DLR County Heritage Plan 2021 – 2025. Requirements under Chapter 12: Development Management, including those under the headings of: • Heritage • Archaeological Heritage • Architectural Heritage - Protected Structures • Architectural Conservation Areas (ACAs)
Landscape	Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape. The conformal impacts and conficts with the appropriate protection of designations relating to the landscape.	Also refer to measures under Biodiversity and Flora and Fauna and Cultural Heritage Policy DLAP18 – Building Height: It is policy that building height in DLAP generally accords with the height guidance set out in chapter 2, subject to policy objectives BHS1 and BHS2 of the Dun Laoghaire Rathdown County Development Plan 2022-2028. (consistent with NP035 of the NPF, SPPR 3 of the 'Urban Development and Building Height; Guidelines for Planning Authorities' (2018) or policy objectives in any subsequent County Development Plan. Having regard to the Building Height Guidelines and more specifically in order to apply SPPR 3 there may be instances where an argument can be made for increased height and/or taller buildings. In circumstances where compliance with policy objective BHS1 and BHS2 of the County Development Plan (see Appendix 5) can be demonstrated additional height may be appropriate, subject to complying with; the safeguards outlined in the CDP, the policies and objectives of this local area plan and the performance based criteria as set out in Table 5.1 of the BH Strategy (See Appendix 5) or as set out in any subsequent County Development Plan. Policy DLAP56 – Design Rationale: It is policy to require a design rationale to accompany all significant proposals for development within/proximate to ACAs within the DLAP area, which demonstrates how the proposed development supports and enhances the character and architectural quality of the ACA. This design rationale should address the design process for the development and how the proposal will integrate with the historic environment with reference to the following: Urban grain; Urban structure; Density and mix; Scale; Materials and detailing;	New Development within an ACA Also refer to measures under Biodiversity and Flora and Fauna and Cultural Heritage. Also refer to measures under Biodiversity and Flora and Fauna and Cultural Heritage.

Topic	Potentially Significant Adverse Effect, if Unmitigated	Local Area Plan measures, including:	Existing Dún Laoghaire-Rathdown County Development Plan 2022-2028 measures, including:
	Ommigated	Historical development.	
		Objective HC1 – Saint Nahi's:	
		It is an Objective to ensure that any development, including	
		improvements to the public realm and publicly owned lands in	
		the vicinity of Saint Nahi's graveyard, protects and enhances	
		the setting of the church and graveyard.	
		Objective HC2 – Maher's Terrace	
		It is an Objective to promote the sensitive adaptation and reuse	
		of Maher's Terrace to open up the courtyard and rear buildings.	
		Objective HC3 – Holy Cross Church:	
		It is an objective of the Council to preserve, enhance and	
		extend the public realm areas adjacent to Holy Cross Church	
		and Parochial House, in order to enhance the setting and visual	
		appeal of Main Street and Pembroke Cottages.	
		Objective HC4 – Taney National School:	
		It is an objective to ensure that any significant development at	
		Taney Parish Primary School seeks to improve the streetscape	
		which addresses the Sydenham Villas ACA. It is envisaged that	
		this would include the re-design of the public realm with more	
		suitable streetscape/public realm features which protect and	
		enhance the character of the ACA. Any redesign should give	
		consideration to retaining turning provision for vehicles	
		including buses and coaches, and to parking, setdown and	
		pickup requirements.	
		Objective HC5 – Undergrounding of telephone /	
		electricity infrastructure:	
		It is an objective to support the undergrounding of the	
		telephone and electricity wires that are within and adjacent to	
		the Sydenham Villas ACA, in order to enhance the ACA's character.	
		Objective HC6 – New Development:	
		It is an objective to ensure that all new development within the	
		Main Hospital Complex character area seeks to preserve the	
		special conservation interest of the Protected Structures and	
		secure their re-use as part of the wider re-development of the	
		CMH lands. The architectural merits of subsequent extension	
		elements to these buildings should also be sufficiently	
		considered, and the re-use of these extension elements will be	
		sought where such extensions are of sufficient heritage value.	
		Objective HC7 – Reuse of Protected Structure:	
		It is an Objective of the Council to seek the sensitive reuse and	
		adaptation of the main hospital building and associated	
		historical elements to provide for residential, cultural, office,	
		employment, civic, retail, enterprise, or community uses. Any	
		use should not detract from any adjoining residential uses.	
		Objective HC8 – Boundary Treatment:	
		It is an Objective of the Council to seek the retention of	
		substantial elements of the perimeter wall as part of the re-	
		development of the CMH lands, except where their removal in	
		part is required to facilitate permeability and connectivity, as	
		per the objectives set out in Chapters 2 and 3 of this Plan.	
		Objective HC9 – Adaptive reuse of features:	
		It is an Objective of the Council to seek the retention and	
		adaptive re-use of the gate lodge, the walled garden and	
		substantial elements of the perimeter wall as part of the re-	
		development of the CMH lands. Any re-use should respect the	

Topic	Potentially Significant	Local Area Plan measures, including:	Existing Dún Laoghaire-Rathdown County Development Plan 2022-2028 measures, including:
	Adverse Effect, if		
	Unmitigated		
		contributions that these features of conservation interest make	
		to the setting of the CMH lands.	
		Objective HC10 – Open Character	
		It is an Objective of the Council to ensure that the 'open'	
		character and landscaped setting of the CMH lands informs the	
		re-development of the lands. Any design should seek to	
		celebrate and enhance the setting of the unique built and	
		natural features that contribute to the character of these lands.	
		Policy DLAP57 - Nineteenth and Twentieth Century	
		Buildings:	
		In addition to Policy HC1 of this draft LAP and in accordance	
		with the Policy Objectives set out in section 11.4.3 of the 'Dún	
		Laoghaire-Rathdown County Development Plan, 2022-2028', it	
		is policy to promote the retention and re-use of older buildings	
		and structures within Dundrum which, though they may not	
		meet the criteria for inclusion on the Record of Protected	
		Structures, make a positive contribution to the historic built	
		environment of the town. In particular, this may include	
		exemplar nineteenth and twentieth century buildings and	
		features, whose character, setting and remaining original fabric	
		should be suitably respected as part of any future development.	
		Policy DLAP58 – Archaeological Heritage:	
		It is policy to manage the development of Dundrum in a	
		manner that protects and conserves the Archaeological	
		Heritage of the area and fully recognises its role in protecting	
		this resource for future generations to enjoy.	
		Policy DLAP59 – Monuments and Places:	
		It is policy that no development in the vicinity of a feature	
		included in the Record of Monuments & Places (RMP) will be	
		permitted which seriously detracts from the setting of the	
		feature or which is seriously injurious to its cultural or	
		educational value.	

Section 10 Monitoring Measures

10.1 Introduction

The SEA Directive requires that the significant environmental effects of the implementation of plans and programmes are monitored. This section details the measures which can be considered and used as appropriate when it comes to monitoring the likely significant effects of implementing the Plan. The measures may be updated over time, as new requirements and information emerge, for example.

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

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

10.2 Indicators and Targets

Monitoring is based around indicators which allow quantitative measures of trends and progress over time relating to the Strategic Environmental Objectives identified in Section 5 and used in the evaluation. Indicators are accompanied by targets which are identified with regard to the relevant strategic actions.

Given the position of the Local Area Plan in the land use planning hierarchy beneath the Dún Laoghaire-Rathdown County Development Plan 2022-2028, the measures identified in that County Development Plan SEA have been used as they are or having been slightly modified – in most instances. This consistency across the hierarchy of land use plans will improve the efficiency and effectiveness of future monitoring.

Table 10.1 overleaf shows the indicators and targets which have been selected for monitoring the likely significant environmental effects of implementing the Plan, if unmitigated.

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

10.3 Sources

The Plan forms part of the wider land use planning framework comprising a hierarchy of policies, plans, programmes, etc. This wider framework, including the National Planning Framework, the Eastern and Midland RSES and the County Development Plan is subject to its own SEA (and associated monitoring) requirements. Individual projects will be subject to their own monitoring requirements as relevant.

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

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

Internal monitoring of the environmental effects of grants of permission in the Council would provide monitoring of certain indicators on a *grant of permission*⁶⁷ basis. Where significant adverse effects as a result of the development to be permitted are identified, such effects could be identified, recorded and used to inform monitoring evaluation.

effects as a result of a development to be permitted can help to fulfill monitoring requirements.

⁶⁷ The likely significant effects of development proposals on environmental sensitivities are further determined during the development management process. Documenting any identified

10.4 Reporting

A stand-alone Monitoring Report on the significant environmental effects of implementing the Plan will be prepared in advance of the beginning of the review of the Plan. The measures set out on Table 10.1 can be considered and used as appropriate when it comes to monitoring the likely significant effects of implementing the Plan. The indicators may be updated over time, as new requirements and information emerge, for example.

Reporting may be undertaken in conjunction with the monitoring reporting on other plans, such as the County Development Plan and other Local Area Plans.

The Council is responsible for the ongoing review of indicators and targets, collating existing relevant monitored data, the preparation of monitoring evaluation report(s), the publication of these reports and, if necessary, the carrying out of remedial action.

SEA Environmental Report for the Dundrum Local Area Plan 2023 **Table 10.1 Indicators, Targets. Sources and Remedial Action**⁶⁸

Environmental	SEO Code	Indicators	Targets	Sources	Remedial Action	
Component Biodiversity, Flora and Fauna		versity, BFF and	Condition of European sites	Require all local level land use plans to include ecosystem services and green/blue infrastructure provisions in their land use plans and as a minimum, to have regard to the required targets in relation to the conservation of European sites, other nature conservation sites, ecological networks, and protected species Complete the review of the Dún Laoghaire-Rathdown Biodiversity Plan 2009-2013 and implement the revised Plan	Department of Housing, Local Government and Heritage report of the implementation of the measures contained in the Habitats Directive - as required by Article 17 of the Directive (every 6 years) Department of Housing, Local Government and Heritage's National Birds Directive Monitoring Report for the under Article 12 (every 6 years) Consultations with the NPWS (see	Where condition of European sites is found to be deteriorating this will be investigated with the Regional Assembly and the DHLGH to establish if the pressures are related to Plan actions / activities. A tailored response will be developed in consultation with these stakeholders in such a circumstance.
		Number of spatial plans that have included ecosystem services content, mapping and policy to protect ecosystem services when their relevant plans are either revised or drafted	Require all local level land use plans to include ecosystem services and green/blue infrastructure provisions in their land use plans and as a minimum, to have regard to the required targets in relation to the conservation of European sites, other nature conservation sites, ecological networks, and protected species Complete the review of the Dún Laoghaire-Rathdown Biodiversity Plan 2009-2013 and implement the revised Plan	Section 10.4) • Internal review of local land use plans	Review internal systems	
		SEAs and AAs as relevant for new Council policies, plans, programmes etc.	 Screen for and undertake SEA and AA as relevant for new Council policies, plans, programmes etc. 	Internal monitoring of preparation of local land use plans	Review internal systems	
		Status of water quality in the County's water bodies	Included under Water below	 Included under Water below 	Included under Water below	
		Compliance of planning permissions with Plan measures providing for the protection of Biodiversity and flora and fauna – see Chapter 8 "Green Infrastructure and Biodiversity" of the County Development Plan	 For planning permission to be only granted when applications demonstrate that they comply with all Plan measures providing for the protection of biodiversity and flora and fauna – see Chapter 8 "Green Infrastructure and Biodiversity" of the County Development Plan 	Internal monitoring of likely significant environmental effects of grants of permission	Review internal systems	
Population and Human Health	РНН	Implementation of Plan measures relating to the promotion of economic growth as provided for by Chapter 6 "Enterprise and Employment Strategy" of the County Development Plan	For review of progress on implementing Plan objectives to demonstrate successful implementation of measures relating to the promotion of economic growth as provided for by Chapter 6 "Enterprise and Employment Strategy" of the County Development Plan	 Internal review of progress on implementing Plan objectives Consultations with Department of Environment, Climate and Communications (see Section 10.4) 	Review internal systems Consultations with Department of Environment, Climate and Communications	

⁶⁸ Indicators are linked to and should be considered alongside the environmental effects outlined in Table 8.3 and proposed mitigation measures outlined in Table 9.1. CAAS for Dún Laoghaire-Rathdown County Council

Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action
- Component			By 2020 all citizens will have access to speeds of 30Mbps, and that 50% of citizens will be subscribing to speeds of 100Mbps (Also relevant to Material Assets)		
		Number of spatial concentrations of health problems arising from environmental factors resulting from development permitted under the Plan	 No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan 	Consultations with the Health Service Executive and EPA	Consultations with the Health Service Executive and EPA
		Proportion of people reporting regular cycling / walking to school and work above previous CSO figures	 Increase in the proportion of people reporting regular cycling / walking to school and work above previous CSO figures 	CSO data Monitoring of the Dún Laoghaire Rathdown County Council's Climate Change Action Plan 2019- 2024	 Where proportion of population shows increase in private car use above Previous CSO figures, the Council will coordinate with the Regional Assembly, the DHLGH, DECC and NTA to develop a tailored response.
		Number of spatial plans that include specific green infrastructure mapping	Require all local level land use plans to include specific green infrastructure mapping	Internal review of local land use plans	Review internal systems
Soil (and Land)	s	Proportion of population growth occurring on infill and brownfield lands compared to greenfield (also relevant to Material Assets)	 Maintain built surface cover nationally to below the EU average of 4% as per the NPF Achieve the 50% target for all new homes within and adjacent to the existing built-up footprint of Dún Laoghaire-Rathdown To map brownfield and infill land parcels across the County. 	 Environmental Protection Agency (EPA), Geoportal Compilation of greenfield and brownfield development for the Department of Housing, Local Government and Heritage AA/Screening for AA for each application 	 Where the proportion of growth on infill and brownfield sites is not keeping pace with the targets set in the NPF and the RSES, the Council will liaise with the Regional Assembly to establish reasons and coordinate actions to address constraints to doing so.
		 Instances where contaminated material generated from brownfield and infill must be disposed of 	 Dispose of contaminated material in compliance with EPA guidance and waste management requirements 	Internal review of grants of permission where contaminated material must be disposed of	Consultations with the EPA and Development Management
		Environmental assessments and AAs as relevant for applications for brownfield and infill development prior to planning permission	Screen for and undertake environmental assessments and AA as relevant for applications for brownfield and infill development prior to planning permission	Internal monitoring of grants of permission	Review internal systems
Water	W	Status of water bodies as reported by the EPA Water Monitoring Programme for the WFD	 Not to cause deterioration in the status of any surface water or affect the ability of any surface water to achieve 'good status' Implementation of the objectives of the second cycle of the River Basin Management Plan by 2021 (and subsequent iterations as relevant) 	EPA Monitoring Programme for WFD compliance	 Where water bodies are failing to meet at least good status this will be investigated with the DHLGH Water Section, the EPA Catchment Unit, the Regional Assembly and, as relevant, Uisce Éireann to establish if the pressures are related to Plan actions / activities. A tailored response will be developed in consultation with these stakeholders in such a circumstance. Where marine water bodies are failing to meet good ecological status, this will be interrogated with the Marine Institute and the DHLGH to establish if the pressures are related to RSES activities. A tailored response will be developed in consultation with the Marine Institute and DHLGH in such a circumstance.

Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action
		Number of incompatible	Minimise developments granted permission	Internal monitoring of likely	Where planning applications are rejected due to insufficient capacity in the Wastewater treatment Plant (WWTP) or failure of the WWTP to meet Emission Limit Values, the Council will consider whether it is necessary to coordinate a response with the EMRA, EPA and Uisce Éireann to achieve the necessary capacity. Where planning applications are being permitted.
		developments permitted within flood risk areas	on lands which pose - or are likely to pose in the future - a significant flood risk	significant environmental effects of grants of permission	on flood zones, the Council will ensure that such grants are in compliance with the Flood Risk Management Guidelines and include appropriate flood risk mitigation and management measures.
Material Assets	MA	Programmed delivery of Uisce Éireann infrastructure for all key growth towns in line with Uisce Éireann Investment Plan and prioritisation programme to ensure sustainable growth can be accommodated Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the Plan	 All new developments granted permission to be connected to and adequately and appropriately served by waste water treatment over the lifetime of the Plan Where septic tanks are proposed, for planning permission to be only granted when applications demonstrate that the outfall from the septic tank will not – incombination with other septic tanks—contribute towards any surface or ground water body not meeting the objective of good status under the Water Framework Directive Facilitate, as appropriate, Uisce Éireann in developing water and wastewater infrastructure See also targets relating to greenfield and brownfield development of land under Soil and broadband under Population and Human Health 	Internal monitoring of likely significant environmental effects of grants of permission Consultations with the Uisce Éireann (see Section 10.4) Department of Housing, Local Government and Heritage in conjunction with Local Authorities	Where planning applications are rejected due to insufficient capacity in the Wastewater treatment Plant (WWTP) or failure of the WWTP to meet Emission Limit Values, the Council will consider whether it is necessary to coordinate a response with the EMRA, EPA and Uisce Éireann to achieve the necessary capacity.
		Proportion of people reporting regular cycling / walking to school and work above previous CSO figures	Increase in the proportion of people reporting regular cycling / walking to school and work above previous CSO figures	CSO data Monitoring of the Dún Laoghaire Rathdown County Council's Climate Change Action Plan 2019- 2024	 Where proportion of population shows increase in private car use above Previous CSO figures, the Council will coordinate with the Regional Assembly, the DHLGH, DECC and NTA to develop a tailored response.
Air	A	 Proportion of journeys made by private fossil fuel-based car compared to previous National Travel Survey levels NO_x, SO_x, PM10 and PM2.5 as part of Ambient Air Quality Monitoring 	 Decrease in proportion of journeys made by private fossil fuel-based car compared to previous National Travel Survey levels Improvement in Air Quality trends, particularly in relation to transport related emissions of NO_x and particulate matter 	CSO data Data from the National Travel Survey EPA Air Quality Monitoring Consultations with Department of Transport and Department of Environment, Climate and Communications (see Section 10.4)	Where proportion of population shows increase in private car use above Previous CSO figures, Council will coordinate with the Regional Assembly, DHLGH, DECC and NTA to develop a tailored response. See also entry under Population and human health above

			SEA Environmental Report for the Dundrur	n Local Area Plan 2023	
Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action
Climatic Factors ⁶⁹	С	Implementation of Plan measures relating to climate reduction targets as provided for by Plan provisions including those provided for and referenced in Chapter 3 "Climate Action" of the County Development Plan	 For review of progress on implementing Plan objectives to demonstrate successful implementation of measures climate reduction targets as provided for by Plan provisions including those provided for and referenced in Chapter 3 "Climate Action" of the County Development Plan 	 Internal monitoring of likely significant environmental effects of grants of permission 	Review internal systems
		A competitive, low-carbon, climate-resilient and environmentally sustainable economy Share of renewable energy in transport	 Contribute towards transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050 Contribute towards the target of the Renewable Energy Directive (2009/28/EC), for all Member States to reach a 10% share of renewable energy in transport by facilitating the development of electricity charging and transmission infrastructure, in compliance with the provisions of the Plan 	 Monitoring of the Dún Laoghaire Rathdown County Council's Climate Change Action Plan 2019- 2024 EPA Annual National Greenhouse Gas Emissions Inventory reporting Climate Action Regional Office Consultations with Department of Environment, Climate and Communications (at monitoring evaluation - see Section 10.4) 	Where targets are not achieved, the Council will liaise with the Regional Assembly and the Dublin Climate Action Regional Office to establish reasons and develop solutions.
		Carbon dioxide (CO ₂) emissions across the electricity generation, built environment and transport sectors Energy consumption, the uptake of renewable options and solid fuels for residential heating	 Contribute towards the target of aggregate reduction in carbon dioxide (CO₂) emissions across the electricity generation, built environment and transport sectors To promote reduced energy consumption and support the uptake of renewable options and a move away from solid fuels for residential heating 		
		Proportion of journeys made by private fossil fuel-based car compared to previous levels	Decrease in the proportion of journeys made by residents of the County using private fossil fuel-based car compared to previous levels	 CSO data Monitoring of the Dún Laoghaire Rathdown County Council's Climate Change Action Plan 2019- 2024 	Where trends toward carbon reduction are not recorded, the Council will liaise with the Regional Assembly and the Dublin Climate Action Regional Office to establish reasons and develop solutions.
		Proportion of people reporting regular cycling / walking to school and work above previous CSO figures	Increase in the proportion of people reporting regular cycling / walking to school and work above previous CSO figures	CSO data Monitoring of the Dún Laoghaire Rathdown County Council's Climate Change Action Plan 2019- 2024	Where proportion of population shows increase in private car use above Previous CSO figures, the Council will coordinate with the Regional Assembly, the DHLGH, DECC and NTA to develop a tailored response.

 ⁶⁹ Please also refer to relevant legislation and requirements under Section 4.10, Section 8.6, Section 8.8.3 and Appendix I. Targets under the national Climate Action Plan are reviewed and updated periodically and include those under the headings of Electricity, Built Environment, Transport, Agriculture, Forestry & Land Use and Enterprise.
 CAAS for Dún Laoghaire-Rathdown County Council

Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action
Cultural Heritage	СН	Percentage of entries to the Record of Monuments and Places, and the context these entries within the surrounding landscape where relevant, protected from adverse effects resulting from development which is granted permission under the Plan	Protect entries to the Record of Monuments and Places, and the context of these entries within the surrounding landscape where relevant, from adverse effects resulting from development which is granted permission under the Plan	Internal monitoring of likely significant environmental effects of grants of permission	Where monitoring reveals visitor or development pressure is causing negative effects on designated archaeological or architectural heritage, the Council will work with Regional Assembly, Fáilte Ireland and the National Monuments Service and other stakeholders, as relevant, to address pressures through additional mitigation.
		Percentage of entries to the Record of Protected Structures and Architectural Conservation Areas and their context protected from significant adverse effects arising from new development granted permission under the Plan	Protect entries to the Record of Protected Structures and Architectural Conservation Areas and their context from significant adverse effects arising from new development granted permission under the Plan	Consultation with Department of Housing, Local Government and Heritage (see Section 10.4).	
Landscape	L	Number of developments permitted that result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in Land Use Plans, resulting from development which is granted permission under the Plan	No developments permitted which result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in Land Use Plans, resulting from development which is granted permission under the Plan	Internal monitoring of likely significant environmental effects of grants of permission	Where monitoring reveals developments permitted which result in avoidable adverse visual impacts on the landscape, the Council will re- examine Plan provisions and the effectiveness of their implementation

Appendix I Relationship with Legislation and Other Policies, Plans and Programmes

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.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
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.	 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 	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 8.2) may arise. Implementation of the Plan 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.	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 8.2) may arise. Implementation of the Plan 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.	 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. 	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 8.2) may arise. Implementation of the Plan 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. 	for all the species of birds referred to in Annex 1.	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 8.2) may

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Legislation, Plan, etc.	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.	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	Relevance to the Plan arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies
		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.	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. 	Ireland's Nitrates Action Programme is designed to prevent pollution of surface waters and ground water from agricultural sources and to protect and improve water quality. Ireland's third 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 8.2) may arise. Implementation of the Plan 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 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 8.2) may arise. Implementation of the Plan 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	 The Directive aims at reducing the risks and impacts of pesticide use on human health and the environment by introducing different targets, tools and measures such as Integrated Pest Management (IPM) or National Action Plans (NAPs). 	 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 8.2) may arise. Implementation of the Plan 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)	 The Renewable Energy Directive establishes an overall policy for the production and promotion of energy from renewable sources in the EU. 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. All EU countries must also ensure that at least 10% of their transport fuels come from renewable sources by 2020. 	 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 8.2) may arise. Implementation of the Plan 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 	 Limit the contribution that conventional biofuels (with a risk of ILUC emissions) make towards attainment of the targets in the Renewable Energy Directive; 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in

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Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective 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.	Summary of lower level objectives, actions etc. 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 1st 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.	Relevance to the Plan combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan 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)	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.	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 8.2) may arise. Implementation of the Plan 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)	Establishes a set of binding measures to help the EU reach its 20% energy efficiency target by 2020. 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.	 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 Energy consumers should be empowered to better manage consumption. This includes easy and free access to data on consumption through individual metering 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. 	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 8.2) may arise. Implementation of the Plan 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 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: Classification, labelling and packaging of chemicals; The Union's Civil Protection Mechanism; The Security Union Agenda including CBRN-E and Protection of critical infrastructure; Policy on environmental liability and on the protection of the environment through criminal law; Safety of offshore oil and gas operations.	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 8.2) may arise. Implementation of the Plan 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.
Biodiversity Strategy for 2030 - Bringing nature back into our lives (European Commission, 2020)	The EU's biodiversity strategy for 2030 is a comprehensive, ambitious and long-term plan to protect nature and reverse the degradation of ecosystems. The strategy aims to put	The Strategy contains specific commitments and actions to be delivered by 2030, including:	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-

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Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	Europe's biodiversity on a path to recovery by 2030, and contains specific actions and commitments.	 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. 	combination effects (see Section 8.2) may arise. Implementation of the Plan 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	Promoting GI in the main EU policy areas.	Where new land use developments or activities
	facilitate Green Infrastructure (GI) projects.	 Supporting EU-level GI projects. Improving access to finance for GI projects. Improving information and promoting innovation. 	occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan 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 Kyoto Protocol (2 nd Kyoto	The UN Kyoto Protocol set of policy measures to reduce greenhouse	The Kyoto Protocol is implemented through the European Climate Change The Kyoto Protocol is implemented through the European Climate Change The Kyoto Protocol is implemented through the European Climate Change The Kyoto Protocol is implemented through the European Climate Change The Kyoto Protocol is implemented through the European Climate Change The Kyoto Protocol is implemented through the European Climate Change The Kyoto Protocol is implemented through the European Climate Change The Kyoto Protocol is implemented through the European Climate Change The Europ	Where new land use developments or activities
Period), the Second European Climate Change Programme (ECCP II), Paris climate conference (COP21) 2015 (Paris Agreement)	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.	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.	occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan 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 2020 Climate and Energy Package	Binding legislation which aims to ensure the European Union meets its climate and energy targets for 2020.	Four pieces of complimentary legislation: Reform of the EU Emissions Trading System (EU ETS) to include a cap on	Where new land use developments or activities occur as a result of this legislation, plan,
·	 Aims to achieve a 20% reduction in EU greenhouse gas emissions from 1990 levels. Aims to raise the share of EU energy consumption produced from renewable resources to 20%. Achieve a 20% improvement in the EU's energy efficiency. 	 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. 	programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan 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	 A 2030 Framework for climate and energy, including EU-wide targets and policy objectives for the period between 2020 and 	To meet the targets, the European Commission has proposed the following policies for 2030:	Where new land use developments or activities occur as a result of this legislation, plan,
and Energy	2030 that has been agreed by European countries.	A reformed EU emissions trading scheme (ETS).	programme, etc., individually or in
	Targets include a 40% cut in greenhouse gas emissions	New indicators for the competitiveness and security of the energy system,	combination with others, potential in-
	compared to 1990 levels, at least a 27% share of renewable energy consumption and at least 27% energy savings	such as price differences with major trading partners, diversification of supply, and interconnection capacity between EU countries.	combination effects (see Section 8.2) may arise. Implementation of the Plan needs to
	compared with the business-as-usual scenario.		comply with all environmental legislation and

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		 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. 	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)	 The CAFE Directive merges existing legislation into a single directive (except for the fourth daughter directive). Sets new air quality objectives for PM_{2.5} (fine particles) including the limit value and exposure related objectives. Accounts for the possibility to discount natural sources of pollution when assessing compliance against limit values. Allows the possibility for time extensions of three years (PM₁₀) or up to five years (NO₂, benzene) for complying with limit values, based on conditions and the assessment by the European Commission. 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. 	 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 8.2) may arise. Implementation of the Plan 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; Draw up action plans to reduce noise where necessary and maintain environmental noise quality where it is good; and Inform and consult the public about noise exposure, its effects, and the measures considered to address noise. The Directive does not set any limit value, nor does it prescribe the measures to be used in the action plans, which remain at the discretion of the competent authorities. 	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 8.2) may arise. Implementation of the Plan 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. 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. 	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 8.2) may arise. Implementation of the Plan 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 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 8.2) may arise. Implementation of the Plan 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 Plan
	Exchange of Information on Quality of Surface Freshwater Directive Shellfish Directive Freshwater Fish Directive Groundwater (Dangerous Substances) Directive Dangerous Substances Directive		
Groundwater Directive (2006/118/EC)	 Protect, control and conserve groundwater. Prevent the deterioration of the status of all bodies of groundwater. 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. 	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 8.2) may arise. Implementation of the Plan 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. Notify consumers when remedial action is being undertaken except where the competent authorities consider the non-compliance with the parametric value to be trivial. 	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 8.2) may arise. Implementation of the Plan 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)	discharge of urban waste water and the treatment and discharge of waste water from certain industrial sectors. • The objective of the Directive is to protect the environment from the adverse effects of waste water discharges.	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 8.2) may arise. Implementation of the Plan 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	Establish a framework of environmental liability based on the 'polluter-pays' principle, to prevent and remedy environmental damage.	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.	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 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards

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		 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. 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. 	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 Convention on the Protection of the Archaeological Heritage (Valletta 1992)	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.	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 8.2) may arise. Implementation of the Plan 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)	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.	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 8.2) may arise. Implementation of the Plan 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.	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 8.2) may arise. Implementation of the Plan 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

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		Greater synergy of competencies among all the public, institutional and private actors concerned.	objectives of the regulatory framework for environmental protection and management.
European Landscape Convention 2000	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 harmonious relationship between social needs, economic activity and the environment. It aims to respond to the public's wish to enjoy high quality landscapes.	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 incombination effects (see Section 8.2) may arise. Implementation of the Plan 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 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 to 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 8.2) may arise. Implementation of the Plan 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 8.2) may arise. Implementation of the Plan 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 8.2) may arise. Implementation of the Plan 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	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 in-

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	 Transparency of actions Technology Finance Adaptation Forests Capacity building 		combination effects (see Section 8.2) may arise. Implementation of the Plan 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 8.2) may arise. Implementation of the Plan 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 incombination effects (see Section 8.2) may arise. Implementation of the Plan 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 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, Later of the aims are achieved by applying REACH, namely: Resultation, 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 8.2) may arise. Implementation of the Plan 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 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 Other provisions of the Convention relate to the development of implementation plans, information exchange, public information, awareness and education, research, development and monitoring, 	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 8.2) may arise. Implementation of the Plan 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 Plan
		technical assistance, financial resources and mechanisms, reporting,	
		effectiveness evaluation and non-compliance	
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 8.2) may arise. Implementation of the Plan 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 8.2) may arise. Implementation of the Plan 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			
Ireland 2040 - Our Plan, the National Planning Framework, and the National Development Plan	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 8.2) may arise. Implementation of the Plan 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 will take account of forecasted future economic and demographic scenarios, affordability considerations and relevant Government policies and will: 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.	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 8.2) may arise. Implementation of the Plan 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 	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 8.2) may

Legislation Plan etc			mmary of lower level objectives, actions etc	Relevance to the Plan
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.	·	thresholds, is generally exempt from the requirement to obtain planning permission. 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. 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).	Relevance to the Plan arise. Implementation of the Plan 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 as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan 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. 477of 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 8.2) may arise. Implementation of the Plan 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.	٠	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 8.2) may arise. Implementation of the Plan 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 8.2) may arise. Implementation of the Plan 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.

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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.1. 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 8.2) may arise. Implementation of the Plan 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 rd 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 Monitoring of the effectiveness of the measures in terms of agricultural practice and impact on water quality.	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 8.2) may arise. Implementation of the Plan 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, as amended	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 8.2) may arise. Implementation of the Plan 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 Climate Action Plan 2023	The National Climate Action Plan 2023 provides a detailed plan for taking decisive action to achieve a 51% reduction in overall greenhouse gas emissions by 2030 and setting Ireland on a path to reach net-zero emissions by no later than 2050, as committed to in the Programme for Government and set out in the Climate Act 2021.	The Plan lists the actions needed to deliver on Ireland's climate targets and sets indicative ranges of emissions reductions for each sector of the economy. It will be updated periodically to ensure alignment with Ireland's legally binding economy-wide carbon budgets and sectoral ceilings.	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 8.2) may arise. Implementation of the Plan 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	The Plan identifies four strategic priorities to guide implementation: • Awareness: raise public awareness of the SDGs;	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in

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	 a whole-of-government approach to implement the 17 Sustainable Development Goals (SDGs). The Plan provides a 'SDG Matrix' which identifies the responsible Government Departments for each of the 169 targets. It also includes a 'SDG Policy Map' indicating the relevant national policies for each of the targets. 	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.	combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan 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 8.2) may arise. Implementation of the Plan 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 Natura 2000 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 8.2) may arise. Implementation of the Plan 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 8.2) may arise. Implementation of the Plan 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 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 costefficient manner for consumers.	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	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 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and

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Esgistation, Fluin, etc.	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.	Building out robust and efficient networks.	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 Climate Mitigation Plan 2017	The Plan represents an initial step to set Ireland on a pathway to achieve the deep decarbonisation required in Ireland by mid-century in line with the Government's policy objectives.	The National Mitigation Plan focuses on the following issues: Climate Action Policy Framework Decarbonising Electricity Generation Decarbonising the Built Environment Decarbonising Transport An Approach to Carbon Neutrality for Agriculture, Forest and Land Use 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 8.2) may arise. Implementation of the Plan 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 8.2) may arise. Implementation of the Plan 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 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 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."	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, and to help Ireland meet its target of 40 per cent of electricity from renewable energy 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 8.2) may arise. Implementation of the Plan 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 8.2) may arise. Implementation of the Plan 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 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	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in

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	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 preparation of the NWRP has been divided into two phases, the combination of which will become the final NWRP. The NWRP Framework Plan (Phase 1) has now been adopted. Phase 2 of the NWRP (four Regional Water Resources Plans), currently in preparation, will address the needs across the 535 individual water supplies and identify the solutions to address these needs.	 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 detailing how we deal with the material that is produced as a result of treating drinking water Assess the water resources available at a national level including lakes, rivers and groundwater 	combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan 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 8.2) may arise. Implementation of the Plan 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 that the right structures and mechanisms are in place so that they are not repeated. 	 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; Access to mortgage finance on reasonable and sustainable terms; 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. 	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 8.2) may arise. Implementation of the Plan 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.
Sustainable Development: A Strategy for Ireland (1997)	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.	The Strategy addresses all areas of Government policy, and of economic and societal activity, which impact on the environment. It seeks to reorientate 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 8.2) may arise. Implementation of the Plan 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"	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 -	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 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies

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National Hazardous Waste	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." This Plan sets out the priorities to be pursued over the next six years	 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. The revised Plan makes various recommendations including under the following 	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
Management Plan 2021-2027	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.	topics: Prevention Collection Self-sufficiency Regulation Legacy issues North-south cooperation Guidance and awareness Implementation	occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan 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	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.	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 8.2) may arise. Implementation of the Plan 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.
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."	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	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 8.2) may arise. Implementation of the Plan 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 8.2) may arise. Implementation of the Plan 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

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			objectives of the regulatory framework for environmental protection and management.
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: reduce distance travelled by private car and encourage smarter travel, including focusing population growth in areas of employment and to encourage people to live in close proximity to places of employment ensuring that alternatives to the car are more widely available, mainly through a radically improved public transport service and through investment in cycling and walking improving the fuel efficiency of motorised transport through improved fleet structure, energy efficient driving and alternative technologies strengthening institutional arrangements to deliver the 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 8.2) may arise. Implementation of the Plan 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.
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.	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 8.2) may arise. Implementation of the Plan 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 8.2) may arise. Implementation of the Plan 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	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	 Adaptation under this Framework should seek to minimise costs and maximise the opportunities arising from climate change. Adaptation actions range from building adaptive capacity (e.g. increasing awareness, sharing information and targeted training) through to policy and finance-based actions. Adaptation actions must be risk based, informed by existing vulnerabilities of our society and systems and an understanding of projected climate change. Adaptation actions taken to increase climate resilience must also consider impacts on other sectors and levels of governance 	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 8.2) may arise. Implementation of the Plan 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 8.2) may arise. Implementation of the Plan needs to

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			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 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 8.2) may arise. Implementation of the Plan 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 Wildlife (Amendment) Act, 2000	The act provides protection and conservation of wild flora and fauna.	Provides protection for certain species, their habitats and important ecosystems Give statutory protection to NHAs Enhances wildlife species and their habitats Includes more species for protection	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 8.2) may arise. Implementation of the Plan 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	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.	To mainstream biodiversity in the decision-making process across all sectors. To substantially strengthen the knowledge base for conservation, management and sustainable use of biodiversity. To increase awareness and appreciation of biodiversity and ecosystems services. To conserve and restore biodiversity and ecosystem services in the wider countryside. To conserve and restore biodiversity and ecosystem services in the marine environment. To expand and improve on the management of protected areas and legally protected species. To substantially strengthen the effectiveness of international governance for biodiversity and ecosystem 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 8.2) may arise. Implementation of the Plan 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 8.2) may arise. Implementation of the Plan 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.

		ort for the Dundrum Local Area Plan 2023	
Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
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 waters) Regulations of 2009 (SI 272 of 2009)	 Transpose the Water Framework Directive into legislation. Outlines the general duty of public authorities in relation to water. 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. 	 Implements River basin districts and characterisation of RBDs and River Basin Management Plans. Requires the public to be informed and consulted on the Plan and for progress reports to be published on 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 surface water quality standards. Establishes threshold values for the classification and protection of surface waters against pollution and deterioration in quality. 	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 8.2) may arise. Implementation of the Plan 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 of 2010 (SI 9 of 2010)	Transpose the requirements of the Groundwater Directive 2006/118/EC into Irish Legislation.	 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 8.2) may arise. Implementation of the Plan 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 8.2) may arise. Implementation of the Plan 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 Water Services (Amendment) Act 2012 Water Services Act (No. 2) 2013	 Provides the water services infrastructure. Outlines the responsibilities involved in delivering and managing water services. Identifies the authority in charge of provision of water and waste water supply. 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. 	Key strategic objectives include: 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 to be enhanced. 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 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.	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 8.2) may arise. Implementation of the Plan 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.
Irish Water's Water Services Strategic Plan 2015 and associated Proposed Capital Investment Plan (2014-2016)	 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. 	Ensure a Safe and Reliable Water Supply.	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 8.2) may

Logislation Dlay -t-		Symmetry of layer layer by a bigotive actions at	Delevence to the Dig-
Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		Protect and Enhance the Environment. Support Social and Foographic Crowth	arise. Implementation of the Plan needs to
		Support Social and Economic Growth. Invest in the Future.	comply with all environmental legislation and
		Invest in the Future.	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	Aims to meet nature conservation obligations while having	Ensure that the implications of management choices for water levels, The implications of the implications of management choices for water levels, The implications of the	Where new land use developments or activities
Plan and Review of Raised Bog	regard to national and local economic, social and cultural	quantity and quality are fully explored, understood and factored into policy	occur as a result of this legislation, plan,
Natural Heritage Areas	needs	making and land use planning.	programme, etc., individually or in
		Review the current raised bog NHA network in terms of its contribution to	combination with others, potential in-
		the national conservation objective for raised bog habitats and determine	combination effects (see Section 8.2) may
		the most suitable sites to replace the losses of active raised bog habitat	arise. Implementation of the Plan needs to
		and high bog areas within the SAC network and to enhance the national	comply with all environmental legislation and
		network of NHAs.	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
Agri Food Strate 2020	This 10 year Stratogy cate out fave high lavel "Missis" +	Each of the Missians has a set of Cools which are undersigned by a series of	environmental protection and management.
Agri-Food Strategy 2030	This 10-year Strategy sets out four high-level "Missions" to be	Each of the Missions has a set of Goals which are underpinned by a series of	Where new land use developments or activities
	achieved in order to develop such a system in Ireland: 1. A Climate Smart, Environmentally Sustainable Agri-Food Sector	Actions.	occur as a result of this legislation, plan, programme, etc., individually or in
	Viable and Resilient Primary Producers with Enhanced Wellbeing		
	3. Food that is Safe, Nutritious and Appealing, Trusted and Valued		combination with others, potential incombination effects (see Section 8.2) may
	at Home and Abroad		arise. Implementation of the Plan needs to
	4. An Innovative, Competitive and Resilient Sector, driven by		comply with all environmental legislation and
	Technology and Talent		align with and cumulatively contribute towards
	realinology and raient		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-vision 2015 Action Plan	Outlines the vision for agricultural industry to improve	not applicable	Where new land use developments or activities
rigit tiolon 20 to honor than	competitiveness and response to market demand while respecting	The approach	occur as a result of this legislation, plan,
	and enhancing the environment		programme, etc., individually or in
	, , , , , , , , , , , , , , , , , , ,		combination with others, potential in-
			combination effects (see Section 8.2) may
			arise. Implementation of the Plan 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	Agri-environmental funding schemes aimed at rural	Establish best practice farming methods and production methods in order	Where new land use developments or activities
Scheme (REPS)	development for the environmental enhancement and	to protect landscapes and maximise conservation.	occur as a result of this legislation, plan,
	protection.	Protect biodiversity, endangered species of flora and fauna and wildlife	programme, etc., individually or in
Agri-Environmental Options		habitats.	combination with others, potential in-
Scheme (AEOS)	both expiring.	Ensure food is produced with the highest regard to the environment.	combination effects (see Section 8.2) may
		Implement nutrient management plans and grassland management plans.	arise. Implementation of the Plan needs to
Green, Low-Carbon, Agri-		Protect and maintain water bodies, wetlands and cultural heritage.	comply with all environmental legislation and
environment Scheme (GLAS)			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
<u> </u>	TI N. II. 10 10 10 11 11 11 11 11 11 11 11 11 11		environmental protection and management.
National Rural Development		At a more detailed level, the programme also:	Where new land use developments or activities
Programme	Department of Agriculture, Fisheries and Food, sets out a		occur as a result of this legislation, plan,
	national programme based on the EU framework for rural		programme, etc., individually or in

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	development and prioritises improving the competitiveness of agriculture, improving the environment and improving the quality of life in rural areas	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	combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan 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 8.2) may arise. Implementation of the Plan 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.
River Basin Management Plan for Ireland 2022-2027 3rd Cycle [in preparation]	This draft River Basin Management Plan sets out the measures that are necessary to protect and restore water quality in Ireland. The overall aim of the plan is to ensure that our natural waters are sustainably managed and that freshwater resources are protected so as to maintain and improve Ireland's water environment.	The River Basin Management Plan sets out the measures necessary to protect and improve the quality of Ireland's waters. These plans are prepared in 6-year cycles, during which a programme of measures must be implemented so as to achieve water quality objectives. Good water quality contributes to protecting human health by improving the quality of drinking water sources and bathing waters.	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 8.2) may arise. Implementation of the Plan 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 crosscutting 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.	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 8.2) may arise. Implementation of the Plan 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 8.2) may arise. Implementation of the Plan 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.

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Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
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 8.2) may arise. Implementation of the Plan 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
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.	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 8.2) may arise. Implementation of the Plan 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:	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 8.2) may arise. Implementation of the Plan 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.
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 8.2) may arise. Implementation of the Plan 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	Outlines objectives and actions aimed at developing a strong cycle network in Ireland Sets out 19 specific objectives, and details the 109 actions, aimed at ensuring that a cycling culture is developed	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 8.2) may arise. Implementation of the Plan 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

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
			objectives of the regulatory framework for environmental protection and management.
National Policy Framework for Alternative Fuels Infrastructure for Transport in Ireland 2017 to 2030	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. 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.	This policy set out to achieve five key goals in transport: Reduce overall travel demand Maximise the efficiency of the transport network Reduce reliance on fossil fuels Reduce transport emissions Improve accessibility to transport These goals remain the cornerstone of transport policy and are fully aligned to the objectives of this National Policy Framework.	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 8.2) may arise. Implementation of the Plan 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 8.2) may arise. Implementation of the Plan 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 8.2) may arise. Implementation of the Plan 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 8.2) may arise. Implementation of the Plan 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 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 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
			 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 2021-2025	The All-Ireland Pollinator Plan is an island-wide attempt to reverse declines in pollinating insects to ensure the sustainability of our food, avoid additional economic impacts on agriculture, and protect the health of the environment. The main objectives include:	This voluntary Plan identified 81 actions, shared out between over 100 governmental and non-governmental organisations. A large focus of the Plan is to identify actions to improve the quality and amount of flower-rich habitat. Actions range from creating pollinator highways along our transport routes, to supporting pollinators on farmland, in gardens, businesses, and on public land.	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 8.2) may arise. Implementation of the Plan 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 Northern and Western 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 8.2) may arise. Implementation of the Plan 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 Transport Strategy for the Greater Dublin Area 2016-2035, which established an overall framework for transport investment over the next two decades and was subject to full SEA and Stage 2 AA, is a key policy shaping the six-year Integrated Infrastructure Plan. The priorities in the Integrated Infrastructure Plan align with the objectives and priorities set out in the Transport Strategy, focused on improving public and sustainable transport.	The Implementation Plan identifies investment proposals for a number of areas including:	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 8.2) may arise. Implementation of the Plan 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 (2022-2042)	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."	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.	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 8.2) may arise. Implementation of the Plan 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 Plan
Greater Dublin Area Cycle	Ensure that the quality of waters covered by the plan is	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 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 Aims to identify and determine:	Where new land use developments or activities
Network Plan	maintained. Maintain and improve the quantity and quality of water included in the Plan scope.	 The Urban Cycle Network at the Primary, Secondary and Feeder level. The Inter-Urban Cycle Network linking the relevant sections of the Urban Network including the elements of the National Cycle Network within the Greater Dublin Area including linkages to key transport locations outside of urban areas such as airports and ports. The Green Route Network being cycle routes for development of tourist, recreational and leisure purposes. 	occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential incombination effects (see Section 8.2) may arise. Implementation of the Plan 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.
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 8.2) may arise. Implementation of the Plan 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 8.2) may arise. Implementation of the Plan 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), including the Dún Laoghaire-Rathdown LECP 2023-2028	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 8.2) may arise. Implementation of the Plan 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.

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Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Land Use Plans in force within Dún Laoghaire-Rathdown and in other adjoining planning authorities. This includes Development Plans, Local Area Plans and Planning Schemes	Outline planning objectives for land use development. Strategic framework for planning and sustainable development including those set out in National Planning Framework and Regional Economic and Spatial Strategies. Set out the policies and proposals to guide development in the specific Local Authority area.	 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 8.2) may arise. Implementation of the Plan 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.
Dún Laoghaire-Rathdown County Biodiversity Action Plan 2021-2025	Aims to protect, conserve, enhance and restore heritage, biodiversity and ecosystem services across all spectrums.	Plan's objectives 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 8.2) may arise. Implementation of the Plan 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.
County Dún Laoghaire- Rathdown Character Assessment and Landscape Character Assessments in adjoining local authorities	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 8.2) may arise. Implementation of the Plan 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.
Dún Laoghaire-Rathdown Tree Strategy 2011-2015	It aims to standardise and guide the Council's approach to trees throughout the county, provide clarity to actions and decisions, and encourage the balanced consideration of individual expectations, public amenity and best practice.	The tree strategy has four overall aims, each with a series of objectives. Specific actions and timescales will be developed on a cyclical basis so that progress can be measured: • Protect and Care for our trees • Plant more trees, in the right place • Promote education and awareness of trees • Cooperate and engage	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 8.2) may arise. Implementation of the Plan 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.
Dún Laoghaire-Rathdown County Heritage Plan 2021-2025	The Plan's overarching aim is 'Contributing towards quality of life'.	The Plan details a number of actions and initiatives aimed at ensuring that heritage continues to make a significant contribution to quality of life and remains an important part of the social and cultural infrastructure of the County.	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 8.2) may arise. Implementation of the Plan 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

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Legislation, Flan, etc.	Summary of high-level aim pulposer objective	Summary of lower level objectives, actions etc.	objectives of the regulatory framework for
			environmental protection and management.
Dublin Agglomeration Environmental Noise Action Plan 2018-2023	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 8.2) may arise. Implementation of the Plan 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.
Dún Laoghaire-Rathdown County Council's Climate Change Action Plan 2019-2024	Respond to the impact that climate change is having, and will continue to have. Attempt to climate change adaptation and mitigation.	The Dún Laoghaire-Rathdown County Council Climate Change Action Plan 2019-2024 features a range of actions across sectors including: Energy and Buildings; Flood Relief and Resilience; Transport; Resource Management; Coastal Protection and nature-based solutions; and Communities. The four main targets of the Plan are: Make Dublin a climate-resilient region by reducing the impacts of future climate change-related events; Actively engage and inform our citizens on climate change; 33% improvement in the Council's energy efficiency by 2020; and 40% reduction in the Council's greenhouse gas emissions 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 8.2) may arise. Implementation of the Plan 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.
Dublin Regional Energy Masterplan (DREM)	To examine pathways available to the four Dublin Authorities to achieve carbon emission reduction targets to 2030 and 2050.	The masterplan addresses all energy sectors of electricity, heat and transport. Two baseline scenarios were established; the current situation and the future 'business-as-usual' situation, which models the effects of current national level policy implementation to 2030 and 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 8.2) may arise. Implementation of the Plan 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.
Dún Laoghaire-Rathdown Tourism Strategy and Marketing Plan 2017-2022	The Vision for Dún Laoghaire-Rathdown as a tourism destination is: "A highly attractive and accessible tourism destination, steeped in culture and maritime heritage, combining a breath-taking coast, inviting villages and towns, and Dublin Mountains adventures, delivering memorable and distinct experiences for visitors."	The Strategy is underpinned by five strategic objectives each supported by a number of proposals to enable each of the objectives to be realised.	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 8.2) may arise. Implementation of the Plan 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 8.2) may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards

SEA Environmental Report for the Dundrum Local Area Plan 2023

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
			 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 Wild Atlantic Way, Regional Tourism Development Strategies and Destination Experience Development Plans	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 8.2) may arise. Implementation of the Plan 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 8.2) may arise. Implementation of the Plan 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.

SEA ENVIRONMENTAL REPORT

APPENDIX II — Non-Technical Summary

FOR THE

DUNDRUM LOCAL AREA PLAN 2023

for: Dún Laoghaire-Rathdown County Council

County Hall Marine Road Dún Laoghaire



by: CAAS Ltd.

1st Floor 24-26 Ormond Quay Upper Dublin



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Section 1 Introduction and Terms of Reference

This is the Non-Technical Summary of the Environmental Report for the Dundrum Local Area Plan 2023 (hereafter referred to as 'the Plan'). The purpose of the Environmental Report is to provide a clear understanding of the likely environmental consequences of decisions regarding the adoption and implementation of the Plan. The Environmental Report has been prepared as part of a Strategic Environmental Assessment (SEA) process for the Plan.

What is SEA?

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

Why is SEA needed? The Benefits

SEA is the planning authority's and the public's guide to what are generally the best areas for development in the town.

SEA enables the planning authority to direct development towards robust, well-serviced and connected areas—thereby facilitating the general avoidance of incompatible development in the most sensitive, least well-serviced and least well-connected areas.

SEA provides greater certainty to the public and to developers. Plans are more likely to be adopted without delays or challenges and planning applications are more likely to be granted permission. Environmental mitigation is more likely to cost less.

The Plan directs incompatible development away from the most sensitive areas of Dundrum. Development of generally more robust, well-serviced and well-connected areas of the Dundrum area will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation.

Compact development can be accompanied by placemaking initiatives to enable Dundrum to become a more desirable place to live – so that it maintains populations and services.

Compatible sustainable development in Dundrum's more environmentally sensitive areas is also provided for, subject to various requirements relating to environmental protection and management being met.

How does the SEA work?

All of the main environmental issues in the area were assembled and considered by the team who prepared the Plan. This helped them to devise a Plan that contributes towards the protection and management of environmental sensitivities. It also helped to identify wherever potential conflicts between the Plan and the environment exist and enabled these conflicts to be mitigated.

The SEA was scoped in consultation with designated environmental authorities.

What is included in the Environmental Report that accompanies the Plan?

- A description of the environment and the key environmental issues;
- A description and assessment of alternatives for the Plan;
- An assessment of the provisions of the Plan; and,
- Mitigation measures, which will avoid/reduce the environmental effects of implementing the Plan and will contribute towards compliance with important environmental protection legislation.

Difficulties Encountered during the SEA process

No significant difficulties have been encountered during the undertaking of the assessment.

What happens at the end of the process?

An SEA Statement is prepared which summarises, inter alia, how environmental considerations have been integrated into the Plan.

Section 2 The Plan

2.1 Introduction

Dún Laoghaire-Rathdown County Council has adopted a Local Area Plan (LAP) for Dundrum under the Planning and Development Act 2000 (as amended). The Plan sets out an overall strategy for the proper planning and sustainable development over the years 2023.

LAPs are required to be consistent with the Policy and Objectives of the County Development Plan and its Core Strategy, as well as the National Planning Framework and Regional Spatial Economic Strategies.

The LAP should be read in conjunction with the Dún Laoghaire-Rathdown County Development Plan 2022-2028, which sets out the overarching development strategy for the administrative area of Dún Laoghaire-Rathdown County Council. Where conflicting policies and objectives arise between the LAP and the CDP in relation to SEA and AA matters the CDP shall take precedence.

2.2 Summary of the Plan

The LAP sets out an overall strategy for the proper planning and sustainable development of Dundrum in the context of Project Ireland 2040, the National Planning Framework, the Regional Spatial and Economic Strategy for the Eastern and Midland Region and the County Development Plan. It is informed by Ministerial Guidelines issued pursuant to Section 28 of the Act together with EU requirements regarding SEA and AA.

The LAP looks at both existing and future Dundrum and aims to set out a framework to guide future development and make sure that there are enough schools, open spaces, childcare and community facilities, shops and employment to serve the needs of the community.

As a Major Town Centre Dundrum plays a very important role in the County and whilst the LAP covers a relatively small area, Dundrum as a town, while serving the local need, also has a much wider draw in terms of the shops, educational facilities, and civic, cultural and community facilities that currently exist and that will exist in the future.

An analysis of population has indicated that the population of the plan area could double over the next 20 years from circa 6,000 to circa 11,500 persons. The majority of new homes will be in apartment or duplex type units with the minority in more traditional style houses.

At the heart of the Plan is the "ten minute neighbourhood" concept whereby a person should be able to walk, cycle or use high quality public transport to access the various amenities listed above within ten minutes of their home. The Luas and planned bus routes mean that Dundrum has the potential to reach a much wider area. An Area Based Transport Assessment (ABTA) has fed into the local area plan policy formulation.

The LAP is set out in nine chapters, setting out various Plan provisions, as follows:

- 1. Introduction, Context and Analysis (including Vision)
- 2. Urban Framework and Site Development Frameworks
- 3. People and Homes
- 4. Transport and Movement
- 5. Climate Change Adaptation and Mitigation
- 6. Multifunctional Towns and Neighbourhood Centres
- 7. Employment
- 8. Heritage and Conservation
- 9. Implementation and Monitoring

The vision for Dundrum is of a vibrant, inclusive, sustainable and attractive town which is connected to and supports surrounding neighbourhoods and functions as a place people can enjoy, to live in, work in and visit.

2.3 Strategic work undertaken by the Council to ensure contribution towards environmental protection and sustainable development

In advance of the placing of the Draft Plan on public display, Dún Laoghaire-Rathdown County Council undertook various works in order to inform the preparation of the Plan. This included a detailed population analysis and preparation of an Area Based Transport Analysis, which has informed the Plan.

The findings of this strategic work have been integrated into the Plan and will contribute towards both environmental protection and management and sustainable development.

The undertaking of this SEA process was part of this strategic work and contributed towards the integration of environmental considerations into individual Plan provisions.

2.4 Relationship with other relevant Plans and Programmes

It is acknowledged that many of the major issues affecting Dundrum's development are contingent on national policy and government funding.

The Plan sits within a hierarchy of statutory documents setting out public policy for, among other things, land use planning, infrastructure, sustainable development, tourism, environmental protection and environmental management. The Plan must comply with relevant higher-level strategic actions and may, in turn, guide lower-level strategic actions. These documents include plans and programmes such as those referred to throughout this summary. These documents have been subject to their own environmental assessment processes, as relevant.

The National Planning Framework (NPF) sets out Ireland's planning policy direction up to 2040. The NPF is to be implemented through Regional Spatial and Economic Strategies (RSESs) and lower tier Development Plans and Local Area Plans. The RSES for the Eastern and Midland Region sets out objectives for land use planning, tourism, infrastructure, sustainable development, environmental protection and environmental management that have been subject to environmental assessment and must be implemented through the Dún Laoghaire-Rathdown County Development Plan 2022-2028, which sets out the overarching development strategy for the County, and the Local Area Plan.

In order to be realised, projects included in the Local Area Plan (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.

Section 3 The Environmental Baseline

3.1 Introduction

The summary of the environmental baseline of the Plan area is described in this section. This baseline together with the Strategic Environmental Objectives, which are identified in Section 3.11, is used in order to identify, describe and evaluate the likely significant environmental effects of implementing the Plan and in order to determine appropriate monitoring measures.

3.2 Likely Evolution of the Environment in the Absence of the Plan

In the absence of a new Local Area Plan, the framework for development across the Plan area would be provided by the County Development Plan and other related documents. There would be no Local Area Plan to provide additional detail beyond that provided already through the existing planning framework as how to achieve sustainable development and environmental protection and management in the town.

As a result, there would be both:

- A decreased likelihood in the extent, magnitude and frequency of the positive environmental effects identified by this
 assessment occurring; and;
- An increased likelihood in the extent, magnitude and frequency of the adverse environmental effects identified by this
 assessment occurring.

3.3 Biodiversity and Flora and Fauna

Key ecological sensitivities within and surrounding the Plan area include:

- Ecologically designated sites less than 5 km from the Plan area, including: FitzSimon's Wood proposed Natural Heritage Area, c. 2 km to the south of the Plan area; South Dublin Bay and River Tolka Estuary Special Protection Area, c. 2.8 km to the north-east of the Plan area; and South Dublin Bay Special Area of Conservation, c. 2.8 km to the north-east of the plan area;
- Locally important habitats, including various woodlands, parks, gardens, hedgerows and lands used for agriculture
 within and surrounding the Plan area, providing habitats for flora and fauna and facilitating linkages and corridors to the
 surrounding countryside for the wildlife; and
- Aquatic and riverine ecology associated with the streams and rivers draining the Plan area, including the River Dundrum
 Slang, which flows into the River Dodder at Milltown, and associated riparian buffer zones. The Dodder and several of its
 tributaries are exceptional in supporting Atlantic salmon and sea trout in addition to resident brown trout populations, eels
 and other fish species. Stretches of the Dodder support protected species including otter and bats.

There are no SACs or SPAs designated within the Plan area, however there are a total of 17 European sites (ten SACs and seven SPAs) within 15 km of the Plan boundary (as listed below and shown on Figure 3.1):

- South Dublin Bay and River Tolka Estuary SPA (Site Code: 004024)¹;
- South Dublin Bay SAC (Site Code 000210)²;
- Wicklow Mountains SAC (Site Code: 002122)³;
- Wicklow Mountains SPA (Site Code: 004040)⁴;
- North Bull Island SPA (Site Code: 004006)⁵;
- North Dublin Bay SAC (Site Code: 000206)6;
- Knocksink Wood SAC (Site Code: 000725)⁷
- Glenasmole Valley SAC (Site Code: 001209)8;
- Dalkey Islands SPA (Site Code: 004172)⁹;

¹ Sensitive features comprise: grey plover; knot oystercatcher; ringed plover; roseate tern; dunlin; black-headed gull; wetland and waterbirds; redshank; light-bellied brent goose; bar-tailed godwit common tern; sanderling; and arctic tern.

² Sensitive features comprise: salicornia and other annuals colonising mud and sand; mudflats and sandflats not covered by seawater at low tide; annual vegetation of drift lines; and embryonic shifting dunes.

³ Sensitive features comprise: otter; Alpine and Boreal heaths; Northern Atlantic wet heaths; siliceous rocky slopes with chasmophytic vegetation; oligotrophic waters containing very few minerals of sandy plains; species-rich nardus grasslands, on siliceous substrates in mountain areas - and submountain areas in continental Europe; European dry heaths; calcareous rocky slopes with chasmophytic vegetation; siliceous scree of the montane to snow levels; natural dystrophic lakes and ponds; calaminarian grasslands; blanket bogs; and old sessile oak woods with Ilex and Blechnum in the British.
⁴ Sensitive features comprise: merlin and peregrine falcon.

⁵ Sensitive features comprise: dunlin; black-tailed godwit; bar-tailed godwit; shelduck; pintail; curlew; sanderling; oystercatcher; wetland and waterbirds; black-headed gull; golden plover; turnstone; knot light-bellied brent goose; teal; redshank; and shoveler grey plover.

⁶ Sensitive features comprise: salicornia and other annuals colonising mud and sand; embryonic shifting dunes; Atlantic salt meadows; annual vegetation of drift lines; fixed coastal dunes with herbaceous vegetation - grey dunes; petalwort Mediterranean salt meadows; humid dune slacks; and shifting dunes along the shoreline; mudflats and sandflats not covered by seawater at low tide.

⁷ Sensitive features comprise: old sessile oak woods; alluvial forests; and petrifying springs with tufa formation.

⁸ Sensitive features comprise: petrifying springs with tufa formation; semi-natural dry grasslands and scrubland facies on calcareous substrates; and molinia meadows on calcareous, peaty or clayey-silt-laden soils.

- Rockabill to Dalkey Island SAC (Site Code: 003000)¹⁰;
- Ballyman Glen SAC (Site Code: 000713)¹¹;
- Howth Head SAC (Site Code: 000202)¹²;
- Balydoyle Bay SAC (Site Code: 000199)¹³;
- Balydoyle Bay SPA (Site Code: 004016)¹⁴;
- Bray Head SAC (Site Code: 000714)¹⁵;
- Howth Head Coast SPA (Site Code: 004113)¹⁶; and
- North-west Irish Sea SPA¹⁷.

There are no other hydrologically connected European sites within the wider region beyond 15 km buffer zone (i.e. downstream of the Plan boundary).

Ecological networks are important in connecting areas of local biodiversity with each other and with nearby designated sites so as to prevent islands of habitat from being isolated entities. They are composed of linear features, such as tree lines, hedgerows and rivers/streams, which provide corridors or stepping stones for wildlife species moving within their normal range. They are important for the migration, dispersal and genetic exchange of species of flora and fauna particularly for mammals, especially for bats and small birds and facilitate linkages both between and within designated ecological sites, the non-designated surrounding countryside and urban areas. Wildlife corridors within and surrounding the Plan area are shown on Figure 3.2.

Existing Problems

Ireland's Article 17 report on the Status of EU Protected Habitats and Species in Ireland (DCHG, 2019) identifies various Irish, EU-protected habitats and species to be of unfavourable status and many to be still declining, although it also identifies that a range of positive actions are underway. Categories for pressures and threats on Ireland's habitats and species identified by the report comprise:

- Agriculture;
- Forestry;
- Extraction of resources (minerals, peat, non-renewable energy resources);
- Energy production processes and related infrastructure development;
- Development and operation of transport systems;
- Development, construction and use of residential, commercial, industrial and recreational infrastructure and areas;
- Extraction and cultivation of biological living resources (other than agriculture and forestry);
- Military action, public safety measures, and other human intrusions;
- Alien and problematic species;
- Mixed source pollution;
- Human-induced changes in water regimes;
- · Natural processes (excluding catastrophes and processes induced by human activity or climate change);
- Geological events, natural catastrophes;
- Climate change; and
- Unknown pressures, no pressures and pressures from outside the Member State.

Previous changes in land uses arising from human development have resulted in a loss of biodiversity and flora and fauna; however, legislative objectives governing biodiversity and fauna were not identified as being conflicted with. The Plan includes measures to contribute towards the protection of biodiversity and flora and fauna and associated ecosystem services.

Invasive non-native species are present within the Plan area, along the Slang River corridor, include Japanese knotweed and winter heliotrope. All applications for development within or near the river corridor will need to demonstrate compliance with the Dún Laoghaire-Rathdown County Development Plan 2022-2028 measures relating to invasive non-native species.

Biodiversity in the area also faces a number of challenges including fragmentation of habitats (the River Slang is part-culverted, which can fragment habitats). Proposals for development, including those that

⁹ Sensitive features comprise: common tern; roseate tern; and Arctic tern.

¹⁰ Sensitive features comprise: harbour porpoise and reefs.

¹¹ Sensitive features comprise: petrifying springs with tufa formation and alkaline fens.

¹² Sensitive features comprise: European dry heaths and vegetated sea cliffs of the Atlantic and Baltic coasts.

¹³ Sensitive features comprise: salicornia and other annuals colonising mud and sand; Atlantic salt meadows; Mediterranean salt meadows; and mudflats and sandflats not covered by seawater at low tide.

¹⁴ Sensitive features comprise: ringed plover; shelduck; μetland and waterbirds; grey plover; light-bellied brent goose; bar-tailed godwit; and golden plover.

plover. ¹⁵ Sensitive features comprise: European dry heaths; and vegetated sea cliffs of the Atlantic and Baltic coasts.

¹⁶ Sensitive features comprise: kittiwake.

¹⁷ The designation of this SPA emerged following display of the Draft Plan and Conservation Objectives were shared by the National Parks and Wildlife Service in September 2023. Sensitive features comprise: Fulmar, Little Tern, Red-throated Diver, Cormorant, Shag, Black-headed Gull, Great Northern Diver, Manx Shearwater, Kittiwake, Great Black-backed Gull, Common Scoter, Little Gull, Puffin, Razorbill, Roseate Tern, Common Tern, Common Gull, Guillemot, Herring Gull, Arctic Tern and Lesser Black-backed Gull.

interact with or cross the Slang River, such as blueways and greenways, will be subject to AA under the Habitats Directive.

3.4 Population and Human Health

Census 2016 recorded a population of 5,323 persons in Dundrum. The population projections for the Plan area allocate a potential population increase of approx. 6,500 persons. 18

Dundrum is identified as a Major Town Centre in the Dún Laoghaire-Rathdown County Development Plan 2022-2028. Major Town Centres provide a full range of all types of retail services from newsagents to specialist shops and boutiques, department stores, food stores of all types and a high level of mixed uses including the arts and culture to create vibrant, living places.

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

- · Recreational and development pressure on habitats and landscapes;
- Contribution towards increase in demand for waste water treatment at the municipal level;
- Contribution towards increase in demand for water supply and associated potential impact of water abstraction;
- Potential interactions in flood-sensitive areas; and
- Potential effects on water quality.

Human health has the potential to be impacted upon by environmental vectors (i.e. environmental components such as air, water or soil through which contaminants or pollutants, which have the potential to cause harm, can be transported so that they come into contact with human beings). Hazards or nuisances to human health can arise as a result of exposure to these vectors arising from incompatible adjacent land uses for example. These factors have been considered with regard to the description of: the baseline of each environmental component; and the identification and evaluation of the likely significant environmental effects of implementing the Plan.

Existing Problems

The number of homes within the Plan area with radon levels above the reference level is within the normal range experienced in other locations across the country.

Parts of the Plan area are vulnerable to adverse effects from changes in the occurrence of severe rainfall events and associated flooding from surface water. Flooding in certain circumstances could pose a risk to human health. There is historic and predictive evidence of flooding within the Plan area.

3.5 **Soil**

The built-up areas within and surrounding Dundrum are mainly made up of urban soils. Urban soils are soils, which have been disturbed, transported or manipulated by human activity in the urban environment and are often overlain by a non-agricultural, man-made surface layer that has been produced by mixing, filling or by contamination of land surfaces in urban and suburban areas.

There are no designated County Geological Sites occurring within the Plan area. The closest CGS located c.3 km to the south of the Plan area is the Murphystone Quarry.

The GSI have identified¹⁹ the Plan area as having low levels of landslide susceptibility.

In the absence of mitigation, contaminated materials have the potential to adversely impact upon human health, water quality and habitats and species. As is the case with other urban and semi-urban areas across the country, there is potential for contamination at sites within the Plan area, especially where land uses occurred in the past, in the absence of environmental protection legislation.

¹⁸ Dundrum Local Area Plan 2023

 $^{^{19}\} https://www.gsi.ie/en-ie/programmes-and-projects/geohazards/projects/Pages/Landslide-Susceptibility-Mapping.aspx$

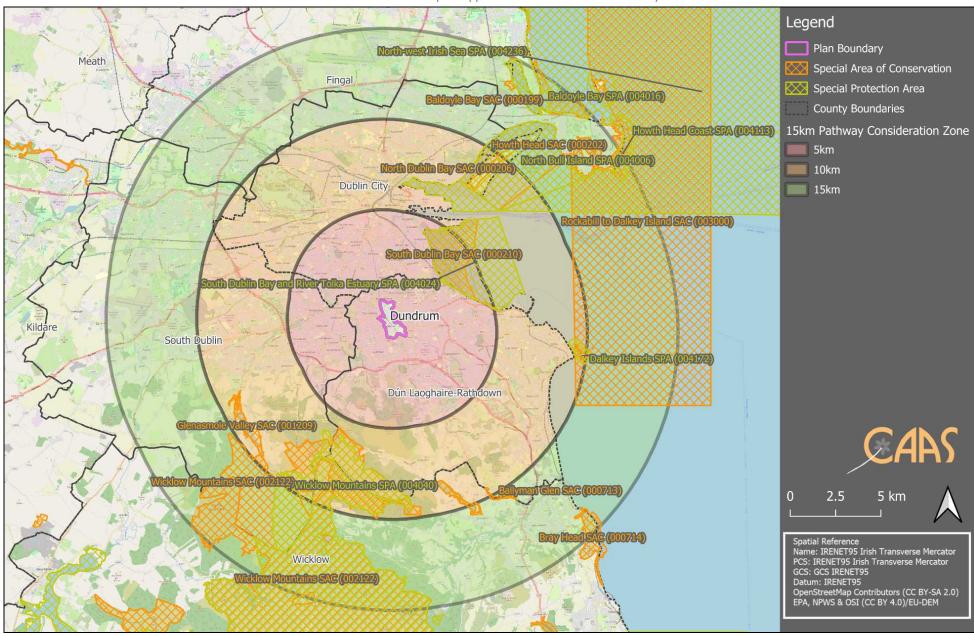


Figure 3.1 European Sites within and within 15 km buffer of the Plan area



Figure 3.2 Wildlife Corridors (Source: Dundrum Local Area Plan 2023)

3.6 Water

Surface and Ground Water Status

Surface water within the Plan area drains toward the Dundrum Slang and its tributaries. The river originates at Three Rock Mountain and flows through Ticknock and Ballinteer. The main tributary of the Slang within the Plan area flows from the south. The River loops around through the Ardglass Estate and continues northward until it meets the River Dodder at Milltown.

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

The current WFD (2016-2021) status²⁰ of the River Slang draining the Plan area is *moderate* (identified by the EPA as: 'Dodder_50'). Figure 3.3 illustrates the WFD surface water status within and surrounding the Plan area.

The WFD status (2016-2021) of all groundwater underlying the Plan area is currently identified as being of *good status*, meeting the objectives of the Water Framework Directive.

Surface and groundwater bodies will need to ensure no deterioration in order to comply with the objectives of the WFD. Various water bodies will need improvement to meet these objectives. The Plan includes provisions that will contribute towards maintenance and improvement in the status of waters.

Aquifer Vulnerability and Productivity

Aquifer vulnerability refers to the ease with which pollutants of various kinds can enter into groundwater. The aquifers underlying the Plan area are as a mix of vulnerabilities:

- High and Extreme vulnerability and Extreme (Rock at or near surface or karst), in parts of the south of the Plan area; and
- Moderate vulnerability, in parts of the south of the Plan area; and
- Low vulnerability, in parts of the north of the Plan area.

Flooding

A Strategic Flood Risk Assessment (SFRA) document accompanies this SEA Environmental Report and the Plan. Requirements in relation to SFRA are provided under 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (Department of Environment and Office of Public Works, 2009) and associated Department of the Environment, Community and Local Government Circular PL2/2014.

Flood risk management and drainage provisions are already in force through the Dún Laoghaire-Rathdown County Development Plan 2022-2028 and related provisions have been integrated into the Plan. In addition, land use zoning within the Plan area has been informed by the SFRA process and associated delineation of flood risk zones.

Historical flooding is documented by the Office of Public Works. The most significant source of flood risk within the Plan area is from fluvial (from rivers and streams), however there are other sources of flooding present including pluvial (from rainwater) and risk from surface drainage systems.

Predictive flood risk mapping is also available from the Office of Public Works and is included in the SFRA document that accompanies the Plan.

²⁰ As per EPA's WFD Status 2016-2021 classification (https://gis.epa.ie/EPAMaps/). CAAS for Dún Laoghaire-Rathdown County Council

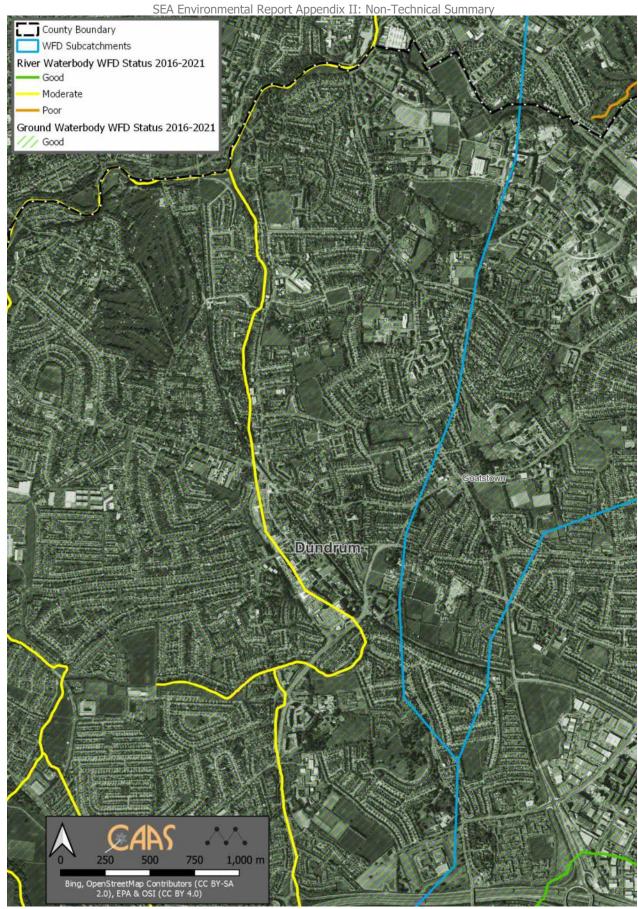


Figure 3.3 Surface Water Status (2016-2021)

3.7 Air and Climatic Factors

Climate mitigation describes the action to reduce the likelihood of climate change occurring or reduce the impact if it does occur. This can include reducing the causes of climate change (e.g. emissions of greenhouse gases) as well as reducing future risks associated with climate change. Climate adaptation is a change in natural or human systems in response to the impacts of climate change. These changes moderate harm or exploit beneficial opportunities and can be in response to actual or expected impacts.

The National Climate Action Plan 2023 provides a detailed plan for taking decisive action to achieve a 51% reduction in overall greenhouse gas emissions by 2030 and setting Ireland on a path to reach net-zero emissions by no later than 2050, as set out in the Climate Act 2021. The Plan lists the actions needed to deliver on climate targets and sets indicative ranges of emissions reductions for each sector of the economy. It will be updated periodically, to ensure alignment with legally binding economy-wide carbon budgets and sectoral ceilings.

The National Adaptation Framework Department of Communications, Climate Action and Environment, 2018), sets out the national strategy to reduce the vulnerability of the country to the negative effects of climate change and to avail of positive impacts. The National Adaptation Framework outlines a whole of government and society approach to climate adaptation. Under the Framework, several Government Departments will be required to prepare sectoral adaptation plans in relation to a priority area that they are responsible for. The statutory Climate Change Adaptation Plan for the Transport Sector was prepared under the Climate Action and Low Carbon Development Act (2015) and the National Adaptation Framework (2018) and published by the Department of Transport in 2019. The Plan sets out the national strategy to reduce Ireland's vulnerability to the negative effects of climate change and to avail of any positive impacts, with an objective to help develop resilience within the sector in order to safeguard transport infrastructure from future climate impacts.

The Dún Laoghaire-Rathdown County Council Climate Change Action Plan 2019-2024 features a range of actions across sectors, including agriculture, forestry, biodiversity, built and archaeological heritage, transport infrastructure, electricity and gas networks, communication networks, flood risk management, water quality, water services infrastructure and health. The Action Plan seeks 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 Dún Laoghaire-Rathdown County Council.

Under the National Climate Action Plan 2023, Dún Laoghaire-Rathdown County Council is required to prepare a locally specific climate action plan for its administrative area. Once adopted, this plan will be valid for five years, and is subject to update at least every five years. The Dún Laoghaire-Rathdown County Council Climate Action Plan will be developed over the coming year and will contribute towards addressing the mitigation of greenhouse gas emissions, climate change adaptation, and strengthening the alignment between national climate policy and the delivery of local climate action. The Dún Laoghaire-Rathdown County Council Climate Action Plan must cover the following areas:

- An emphasis on a place-based approach to climate action, delivering a better understanding of greenhouse gas emissions and climate-related risks at a local level;
- Context-specific conditions and locally-tailored policy making;
- Evidence-based and integrated climate action through adaptation and mitigation measures, centred around an understanding of the role of the Council in climate action; and
- Strategic direction at local and community levels on the delivery of the national climate objective.

The EPA's (2022) Air Quality in Ireland 2021 identifies that:

- Air quality in Ireland is generally good, however, there are localised issues.
- Ireland met all of its EU legal requirements in 2021 but it failed to meet the new WHO-based guideline levels for Health in 2021.
- Air quality monitoring results in 2021 showed that fine particulate matter (PM_{2.5}) mainly from burning solid fuel, and nitrogen dioxide (NO₂) mainly from road transport, remain the main threats to good air quality.
- It is estimated that there are approximately 1,300 premature deaths annually in Ireland due to poor air quality from fine particulate matter (PMs).

With regards to solutions, the report identifies that:

- Ireland and Europe should move towards achieving the health-based WHO air quality guidelines.
- The planned National Clean Air Strategy for Ireland needs to be published and fully implemented.
- Local Authorities must provide more resources to increase air enforcement activities.
- National investment in clean public transport is needed across the country.

3.8 Material Assets

Other material assets, in addition to those referred to below, covered by the SEA include archaeological and architectural heritage (see Section 3.9) natural resources of economic value, such as water and air (see Sections 3.6 and 3.7).

Public Assets and Infrastructure

Public assets and infrastructure that have the potential to be impacted upon by the Plan, if unmitigated, include: resources such as public open spaces, parks and recreational areas; public buildings and services; transport and utility infrastructure (electricity, gas, telecommunications, water supply, waste water infrastructure etc.); and natural resources that are covered under other topics such as water and soil.

Waste Water

The Wastewater Treatment Plant (WWTP) serving Dundrum is currently listed as a priority area (such areas are those where improvements are required to resolve urgent environmental issues).²¹

The Plan area is served by the Ringsend Wastewater Treatment Plant (WWTP) located in the north-west part of the Dublin City, which has a design capacity of 1.64 million Population Equivalent (PE).

The Ringsend WWTP (Registration No. D0034-01) is currently not compliant with the Emission Limit Values (ELVs) set in the Wastewater Discharge Licence in the most recent available Annual Environmental Report 2021 (published in March 2023). The non-compliances were due to capacity issues and ongoing works at the WWTP.²²

Major works underway to facilitate the Ringsend WWTP to treat the increasing volumes of wastewater arriving at the plant to the required standard include: upgrade of the treatment plant; connecting the Howth (Doldrum Bay) area to Ringsend WWTP; and an action plan to address pressure on waters at risk of pollution. Uisce Éireann is working to provide infrastructure to achieve compliance with the Urban Wastewater Treatment Directive for 2.1 million (PE) in the second half of 2023. As indicated by Uisce Éireann, there will be spare capacity available at the plant upon completion of an upgrade project.²³ When all the proposed works are complete in 2025, the Ringsend WWTP will be able to treat wastewater for up to 2.4 million (PE), while meeting the required standards.

Water Supply

Uisce Éireann is responsible for providing and maintaining adequate public water supply infrastructure throughout the county.

Dundrum is located within the Greater Dublin Area Regional Water Resource Zone (WRZ)²⁴ and currently served by the Saggart – Ballymore Eustace Water Supply.²⁵ As identified by Uisce Éireann, there is a potential capacity available to support 2031 population targets.²⁶

Under Section 58 of the Environmental Protection Agency Act 1992, the EPA is required to collect and verify monitoring results for all water supplies in Ireland covered by the European Communities (Drinking Water) Regulations, 2000. The EPA publishes their results in annual reports that are supported by Remedial Action Lists (RALs). The RAL identifies water supplies that are not in compliance with the Regulations mentioned above. The most recent EPA Remedial Action List (Q4 of 2022, published in February 2023)²⁷ does not include any water scheme that supplies the Plan area.

²¹ https://www.epa.ie/publications/compliance--enforcement/waste-water/priority-areas-list-current.php

²²http://epawebapp.epa.ie/licences/lic_eDMS/090151b2808692cb.pdf

²³ Uisce Éireann: Settlements with Waste Water Discharge Authorisations - *Wastewater Treatment Capacity Register*. The register provides an indication of available wastewater treatment capacity based on loads received in 2021 and available treatment plan capacity now or by completion of a project by 2024 (where relevant). Available at: https://www.water.ie/connections/developer-services/capacity-registers/wastewater-treatment-capacity-register/Dublin/ (Published in June 2022).

²⁴ A Water Resource Zone (WRZ) is an independent water supply system serving a region, city, town or village and is governed by topography or the extent of the water distribution network in an area. A WRZ may include multiple Water Treatment Plants and/or sources.

²⁵ https://www.dlrcoco.ie/en/water/supply-areas-sources

²⁶ Uisce Éireann: Capacity Available to meet targeted population growth to 2031 although an improvement to the Level of service (LoS) will be required. This may take the form of leakage reduction and/or capital investment to maintain/improve levels of service as the demand increases. Proposed solutions will be developed & prioritised through the National Water Resources Plan and investment planning process. https://www.water.ie/connections/developer-services/capacity-registers/water-supply-capacity-register/dublin/

²⁷ https://www.epa.ie/publications/compliance--enforcement/drinking-water/annual-drinking-water-reports/epa-drinking-water-remedial-action-list-q4-of-2022.php

Waste Management

Waste management within the Plan area is guided by the Eastern-Midlands Waste Management Plan 2015-2021. The Plan provides a framework for the prevention and management of waste in a sustainable manner in eight local authority areas, including that of Dún Laoghaire-Rathdown's County Council's. The Plan provides a framework for the prevention and management of waste in a sustainable manner in ten local authority areas, including Dún Laoghaire-Rathdown County Council.

There are three Region Waste Management Plans in Ireland and these will be replaced by a new National Waste Management Plan for a Circular Economy, which will take account of the various measures outlined in A Waste Action Plan for A Circular Economy - Ireland's National Waste Policy 2020-2025.

Transport

Dundrum is currently served by the Green Line Luas, which provides public transport to Dublin City Centre, North Dublin and South Dublin. Dundrum is also served by Dublin Bus, providing routes to Dublin Airport, Dublin City Centre and Tallaght.

Significant improvements to public transport is planned for the area including, inter alia, the Luas capacity enhancement and the BusConnects network redesign. There will also be a new bus interchange facility within Dundrum connecting services to the Green Luas Line. The existing road network around Dundrum reaches capacity during peak commuter and shopping periods leading to congestion and delay.

There are accessibility issues for pedestrians accessing Dundrum major town centre from the east and west. The Luas line causes some severance to the east. Steep gradients and the Dundrum Bypass act as a barrier to the west. There is no cycle infrastructure on key local routes accessing the town centre such as Kilmacud Road Upper, Ballinteer Road and Dundrum Road. Recent mobility and public space enhancement works have significantly improved the public realm on Main Street and the northern end of Sandyford Road, and made it a more attractive environment for walking and cycling.

Relevant recommendations arising from the Area Based Transport Assessment (ABTA) have been integrated into the Plan to help ensure a shift towards more sustainable modes of transport.

Existing Problems

The provisions of the Plan will contribute towards protection of the environment with regard to impacts arising from material assets. The provisions of infrastructure and supporting services for development, particularly water and wastewater services, is critical as capacity limitations have been identified (these are summarised above).

3.9 Cultural Heritage

Archaeological Heritage

The Record of Monuments and Places (RMP) is an inventory, put on a statutory basis by amendment to the National Monuments Act 1994, of sites and areas of archaeological significance, numbered and mapped. It is available from the National Monuments Service and at archaeology.ie.

There are number of entries to the RMP within the Plan area comprising:

- Ecclesiastical enclosure located at Churchtown Road Upper, which encompasses three recorded monuments (No. DU022-016001- Ecclesiastical enclosure; No. DU022-016002- Church; and No. DU022-016003- Graveyard;)²⁸;
- Dundrum Castle ruins, which encompasses two recorded monuments: No. DU022-023001- Castle tower house; and No. DU022-023002- Castle Anglo-Norman masonry castle; and
- The Mill Pond/Mill Race, No. DU022-100001- Redundant Record, previously recorded to the west of Main Street. This site is not scheduled for inclusion in the next revision of the RMP.

Architectural Heritage

There are various Protected Structures within the Plan area²⁹, including Saint Nahi's Church (RPS No. 857), Fernbank, Carnegie Library, Dundrum Railway Station, Dundrum Courthouse, Dundrum Castle and Airfield House.

²⁸ An additional two monuments at the ecclesiastical enclosure are listed in the SMR and are due for inclusion in the next revision of the RMP: SMR No. DU022-016004- Graveslab and SMR No. DU022-016005- Graveslab.

²⁹ Dundrum Local Area Plan 2023

An Architectural Conservation Area (ACA) is a place, area, group of structures or townscape, which is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or contributes to the appreciation of a Protected Structure. An ACA may or may not include Protected Structures. In an ACA, protection is placed on the external appearance of such areas or structures. There are four ACAs in Dundrum: Dundrum ACA (which incorporates the Pembroke Cottages and substantial portion of the Main Street); Sydenham Road ACA; Sydenham Villas ACA; and Campfield Terrace ACA.

Existing Problems

The context of archaeological and architectural heritage has changed over time however no existing conflicts with legislative objectives governing archaeological and architectural heritage have been identified.

3.10 Landscape

As a major town centre, Dundrum is an important urban area in the County with a town centre that developed from the historic village of Dundrum. The Plan area, as defined in the existing Dún Laoghaire-Rathdown County Development Plan 2022-2028, has been extended to include lands at Fernbank, the former Notre Dame School site and adjoining open space zoned land to the south. The Plan covers a total area of approximately 168 hectares. There are two main areas identified in the Plan – the lands zoned "Major Town Centre" (MTC) at Dundrum and the former Central Mental Hospital site and surrounding area, which includes the Windy Arbour neighbourhood centre lands and Dundrum Business Park. The two areas are linked by the Dundrum Road, which contains a number of what are termed "opportunity sites".

The Dundrum Plan area encompasses the various parklands areas, individual gardens, communal open spaces, waterways including the River Slang, greens strips and wildlife areas, which adjoin the Luas line and roads and streets, lands at St. Nahi's cemetery, and the various species - both plant and animal - that occupy and/or pass through these areas.

Dundrum developed around a crossing point on the River Slang, with Dundrum Castle standing on the steeply sloping western side of the river. Although culverted in places, the River Slang is an important green/blue infrastructure corridor and habitat in the Dundrum area, providing multi-functional eco-system services such as land drainage, recreational amenity, clean/cool air and a wildlife corridor.

There are a range of different landscapes found in the Plan area, each with varying visual and amenity values, topography, exposure levels and each containing a variety of habitats. Each landscape type has varying capacity to absorb development related to its overall sensitivity.

The existing Dún Laoghaire-Rathdown CDP 2022-2028 identifies 14 Landscape Character Areas (to the south of Dundrum and the more established built envelope in the northern portion of Dún Laoghaire-Rathdown), Areas of High Amenity and several views and prospects within the Council's administrative area. There are no designated Landscape Character Areas, Areas of High Amenity, views or prospects within or adjacent to the Local Area Plan area.

Dundrum's area can be characterised as mainly urban, with one of the earliest places in Ireland with a purpose-built shopping centre known today as 'Dundrum Town Centre'.

Existing Environmental Problems

New developments have resulted in changes to the visual appearance of lands within the Plan area however legislative objectives governing landscape and visual appearance were not identified as being conflicted with.

3.11 Strategic Environmental Objectives

Strategic Environmental Objectives (SEOs) are methodological measures developed from policies that generally govern environmental protection objectives established at international, Community or Member State level e.g. the environmental protection objectives of various European Directives that have been transposed into Irish law and which are required to be implemented. The SEOs are set out under a range of topics (see Table 3.1) and are used as standards against which the provisions of the Plan and the alternatives are evaluated in order to help identify which provisions would be likely to result in significant

environmental effects and where such effects would be likely to occur, if – in the case of adverse effects – unmitigated.

Table 3.1 Strategic Environmental Objectives

Environmental	SEO	Guiding Principle	Strategic Environmental Objectives
Component	Code	Manual and S. C.	To assess and at a state and at
Biodiversity, Flora and Fauna	BFF	No net contribution to biodiversity losses or deterioration	 To preserve, protect, maintain and, where appropriate, enhance the terrestrial, aquatic and soil biodiversity, particularly EU designated sites and protected species Ensure no adverse effects on the integrity of any European site, with regard to its qualifying interests, associated conservation status, structure and function Safeguard national, regional and local designated sites and supporting features which function as stepping stones for migration, dispersal and genetic exchange of wild species Enhance biodiversity in line with the National Biodiversity Strategy and its targets To protect, maintain and conserve natural capital
Population and Human Health	PHH	Improve quality of life for all ages and abilities based on high-quality, serviced, well connected and sustainable residential, working, educational and recreational environments	 Promote economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management Ensure that existing population and planned growth is matched with the required public infrastructure and the required services Safeguard citizens from environment-related pressures and risks to health and well-being
Soil (and Land)	S	Ensure the long-term sustainable management of land	 Protect soils against pollution, and prevent degradation of the soil resource Promote the sustainable use of infill and brownfield sites over the use of greenfield sites Safeguard designated geological sites
Water	W	Protection, improvement and sustainable management of the water resource	 Ensure that the status of water bodies is protected, maintained and improved in line with the requirements of the Water Framework Directive and Marine Strategy Framework Directive Ensure water resources are sustainably managed to deliver proposed regional and County growth targets in the context of existing and projected water supply and wastewater capacity constraints ensuring the protection of receiving environments Avoid inappropriate zoning and development in areas at risk of flooding and areas that are vulnerable to current and future erosion Integrate sustainable water management solutions (such as SuDS, porous surfacing and green roofs) into development proposals
Material Assets	МА	Sustainable and efficient use of natural resources	Optimise existing infrastructure and provide new infrastructure to match population distribution proposals in the County – this includes transport infrastructure Ensure access to affordable, reliable, sustainable and modern energy for all which encourages a broad energy generation mix to ensure security of supply – wind, wave solar, tidal, biomass, energy from waste and traditional fossil fuels Promote the circular economy, reduce waste, and increase energy efficiencies Ensure there is adequate sewerage and drainage infrastructure in place to support new development Reduce the energy demand from the transport sector and support moves to electrification of road and rail transport modes Encourage the transition to a zero-carbon economy by facilitating the development of a grid infrastructure to support renewables and international connectivity. Reduce the average energy consumption per capita including promoting energy efficient buildings, retrofitting, smart- buildings, cities and grids
Air	A	Support clean air policies that reduce the impact of air pollution on the environment and public health	 To avoid, prevent or reduce harmful effects on human health and the environment as a whole resulting from emissions to air from all sectors with particular reference to emissions from transport, residential heating, industry and agriculture Maintain and promote continuing improvement in air quality through the reduction of emissions and promotion of renewable energy and energy efficiency Promote continuing improvement in air quality Reduction of emissions of sulphur dioxide, nitrogen oxides, volatile organic compounds, ammonia and fine particulate matter which are responsible for acidification, eutrophication and ground-level ozone pollution Meet Air Quality Directive standards for the protection of human health — Air Quality Directive Significantly decrease noise pollution and move closer to WHO recommended levels
Climatic Factors	С	Achieving transition to a competitive, low carbon, climate- resilient economy that is cognisant of environmental impacts	 To minimise emissions of greenhouse gasses Integrate sustainable design solutions into infrastructure (e.g. energy efficient buildings; green infrastructure). Contribute towards the reduction of greenhouse gas emissions in line with national targets. Promote development resilient to the effects of climate change Promote the use of renewable energy, energy efficient development and increased use of public transport
Cultural Heritage	СН	Safeguard cultural heritage features and their settings through responsible design and positioning of development	Protect places, features, buildings and landscapes of cultural, archaeological or architectural heritage
Landscape	L	Protect and enhance the landscape character	• To implement the County Development Plan's framework for identification, assessment, protection, management and planning of landscapes having regard to the European Landscape Convention

Section 4 Alternatives

4.1 Introduction

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

4.2 Limitations in Available Alternatives

The Plan is required to be prepared by the existing, already in force, Dún Laoghaire-Rathdown County Development Plan 2022-2028 and the Planning and Development Act 2000 (as amended), which specifies various types of objectives that must be provided for by the Plan.

The alternatives available for the Plan are significantly limited by the provisions of higher-level planning objectives, including those of the National Planning Framework (NPF), the Regional Spatial and Economic Strategy (RSES) for the Eastern and Midlands Region and the County Plan. These documents set out various requirements for the content of the Plan including on topics such as land use zoning.

4.3 Land Use Zoning Alternatives

4.4 Plan Boundary/Area Alternatives

Under **Plan Boundary/Area Alternative 1** (covering the area set out in the Dún Laoghaire-Rathdown County Development Plan) less elements integral to achieving the sustainable '10-minute neighbourhood' concept would be available for consideration by the Local Area Plan. The '10-minute neighbourhood' concept is set out under policy objective PHP4 in the County Development Plan 2022-2028, whereby people can access their day-to-day requirements such a shops, employment, open space and schools within a ten-minute journey from their home by bike, foot or public transport.

Plan Boundary/Area Alternative 1 would not, in addition to the area set out in the Dún Laoghaire-Rathdown County Development Plan, include the Dundrum Business Park, lands at Fernbank, the former Notre Dame School site and adjoining open space zoned land to the south. This would make the articulation of the sustainable '10-minute neighbourhood' concept, and associated benefits with respect to sustainable mobility, compact development, emissions and energy use, more difficult.

Under **Plan Boundary/Area Alternative 2** more elements integral to achieving the sustainable '10-minute neighbourhood' concept would be available for consideration by the Local Area Plan.

Plan Boundary/Area Alternative 1 would, in addition to the area set out in the Dún Laoghaire-Rathdown County Development Plan, include the Dundrum Business Park, lands at Fernbank, the former Notre Dame School site and adjoining open space zoned land to the south. This would make the articulation of the sustainable '10-minute neighbourhood' concept, and associated benefits with respect to sustainable mobility, compact development, emissions and energy use, easier. The extension of the Plan boundary allows for a clearer articulation of the ten-minute neighbourhood concept as it increases the range of everyday needs that are available within the Plan lands.

Selected Plan Boundary/Area Alternative for the Plan: Alternative 2

4.5 Area Based Transport Assessment Alternatives

Informing the Plan with an Area Based Transport Assessment, which focuses on delivering travel solutions that support moving people from the private car to more sustainable modes, (**Area Based Transport Assessment Alternative 1**) would provide a more coordinated and more orderly provision of transport infrastructure and services, with delivery of projects, and associated benefit with respect to sustainable mobility and compact development, more likely. This approach would be more likely to improve the potential for meeting important objectives relating to emissions and energy use. Potentially adverse impacts on environmental components including ecology and water would need to be adequately mitigated at project level.

Not informing the Plan with an Area Based Transport Assessment, which focuses on delivering travel solutions that support moving people from the private car to more sustainable modes, (**Area Based Transport Assessment Alternative 2**) would provide a less coordinated and less orderly provision of transport infrastructure and services, with delivery of projects, and associated benefit with respect to sustainable mobility and compact development, less likely. This approach would be less likely to improve the potential for meeting important objectives relating to emissions and energy use. Potentially adverse impacts arising from more coherently planned transport developments on environmental components, including ecology and water, could be mitigated at both LAP and project level.

Selected Area Based Transport Assessment Alternative for the Plan: Alternative 1

4.6 Ecosystem Services Approach Alternatives

Ecosystem Services Approach Alternative 1 would integrate a strategy throughout the Plan for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way. Principles that would be integrated throughout the Plan, in a coordinated and comprehensive manner, would include:

- Consideration of natural systems by using knowledge of interactions in nature and how ecosystems function
- Taking into account of the services that ecosystems provide including those that underpin social and economic well-being, such as flood and climate regulation or recreation, culture and quality of life
- Involving people those who benefit from the ecosystem services and those managing them need to be involved in decisions that affect them.

This would mean that there would be:

- An increased likelihood in the extent, magnitude and frequency of positive effects occurring with regard to natural capital and ecosystem service issues, such as the management of air quality, noise pollution, light pollution, pollination, flood risk, water bodies and river basins and natural resources supporting energy production and recreation; and
- A decreased likelihood in the extent, magnitude and frequency of adverse effects on natural capital and ecosystem services.

Ecosystem Services Approach Alternative 2 would not integrate a strategy throughout the Plan for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way.

As has been the case over previous plan periods, many natural capital and ecosystem service issues would be integrated into individual Plan Policy Objectives and into decision making at lower tiers of plan preparation and development management. However, this approach would be less coordinated and comprehensive than would be the case under an Ecosystems Services Approach.

This would mean that there would be:

- A decreased likelihood in the extent, magnitude and frequency of positive effects occurring with regard to natural capital and ecosystem service issues; and
- An increased likelihood in the extent, magnitude and frequency of adverse effects on natural capital and ecosystem services.

Selected Ecosystem Services Approach Alternative for the Plan: Alternative 1

4.7 **Built Heritage Alternatives**

A Plan that adds detailed, local-level provisions to the existing planning framework relating to the conservation of built heritage (**Built Heritage Alternative 1**) would further contribute the protection of existing heritage that is already contributed towards by the existing planning framework. By integrating heritage considerations into the Plan, Alternative 1 would be most likely to ensure that new development respects the historic grain of the built environment and archaeology that currently exists.

A Plan that does not add detailed, local-level provisions to the existing planning framework relating to the conservation of built heritage, relying solely on existing provisions, including those included as part of the County Development Plan (**Built Heritage Alternative 2**) would not further contribute the protection of existing heritage that is already contributed towards by the existing planning framework. By not integrating heritage considerations into the Plan, Alternative 2 would be least likely to ensure that new development respects the historic grain of the built environment and archaeology that currently exists.

Selected Built Heritage Alternative for the Plan: Alternative 1

4.8 Approach to Site Development Frameworks Alternatives

A Local Area Plan for Dundrum, including Key Development Sites, would help to direct incompatible development away from the most sensitive areas in the County and beyond and to focus on directing compact, sustainable development within and adjacent to the existing built-up footprint of Dundrum. Development of areas within and adjacent to the existing built-up footprint of Dundrum, which is generally more robust, better serviced and better connected than other lands elsewhere in the County and beyond, would contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development would be accompanied by placemaking initiatives to enable Dundrum to become a more desirable place to live — so it can sustainably accommodate new residents and maintain and improve services to existing and future communities.

Not including Site Development Frameworks that would provide location specific guidance for future planning applications at Key Development Sites (**Approach to Site Development Frameworks Alternative 1**) would reduce the likelihood of sustainable development. Development would be marketled and would seek to comply with relevant planning provisions in the absence of additional guidance. The sustainable development of the Plan area would be less likely than under Alternative 2.

By including Site Development Frameworks that would provide location specific guidance while, at the same time, allowing for flexibility in final design, layout and uses, for future planning applications at Key Development Sites, **Alternative 2** would increase the likelihood of sustainable development.

Including Site Development Frameworks that would outline criteria (which would not allow for flexibility in final design, layout and uses) for future planning applications at Key Development Sites (**Approach to Site Development Frameworks Alternative 3**) would increase the potential to hinder compliance with rigid criteria in the longer term, in a context of evolving market needs and planning requirements.

Selected Approach to Site Development Frameworks Alternative for the Plan: Alternative 2

4.9 Densities Alternatives

The Application of a single standard density across the whole Plan area in order to calculate the potential residential yield relating to land zoned for residential purposes for the Core Strategy (**Density Alternative 1**) could lead to the potential over or undersupply of land for primarily residential purposes. The application of a singular low net residential density could fundamentally undermine the efficient use of land, compact growth and the transition towards a low carbon and more climate resilient society. This would have the potential to push new development towards more environmentally sensitive lands outside of the Plan area that are less well-serviced and less well-connected, resulting in unnecessary potentially significant adverse effects on all environmental components. The application of a singular high net residential density could result in a potential mis-alignment between the supply of zoned land to meet the projected demand for new housing. This could result in a misalignment between new development and essential services provision with associated potential for adverse effects on environmental components.

The Application of different densities at different locations, as appropriate, (**Density Alternative 2**) would provide for the most sustainable Core Strategy, which would contribute towards environmental protection and management the most. Higher densities would be provided where sustainable transport mode opportunities are available and lower densities would be provided where constraints are presented by, for example, cultural heritage designations or the local road network. This approach would contribute towards the efficient use of land, compact growth and the transition towards a low carbon and more climate resilient society. Alternative 2 would help to ensure compact, sustainable development within and adjacent to the existing built-up footprint and would conflict with the protection and management of environmental components the least. Alignment between new development and essential services provision would be most likely under Alternative 2.

Selected Density Alternative for the Plan: Alternative 2

4.10 Transport Infrastructure Alternatives

Under **Transport Infrastructure Alternative 1**, new transport infrastructure would be considered subject to environmental constraints, including those related to habitats and potential impacts (e.g. disturbance from lighting). This would include minimising river crossings, avoiding sensitive habitats, not increasing barriers to flood waters and sustainable design and construction techniques. By focusing on mitigation at both plan and project levels, Alternative 1 would offer the most certainty for environmental protection and management and would be more likely to result in important individual projects (relating to sustainable mobility and emissions/energy objectives) receiving permission.

Under **Transport Infrastructure Alternative 2**, all additional environmental mitigation would be left to be defined in the future, at project level. This would offer the least certainty for environmental protection and management and would be more likely to result in important individual projects (relating to sustainable mobility and emissions objectives) not been given permission.

Selected Transport Infrastructure Alternative for the Plan: Alternative 1

4.11 Selected Alternatives

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

These alternatives have been adopted by the Members having regard to both:

- 1. The environmental effects which were identified by the SEA and are summarised above; and
- 2. Planning including social and economic effects that also were considered by the Members.

Section 5 Summary of Effects arising from Plan

Table 5.1 summarises the overall environmental effects arising from Plan provisions. The effects encompass all in-combination/cumulative effects arising from implementation of the Plan. The potentially significant adverse environmental effects (if unmitigated) arising from implementation of the Plan are detailed as are residual effects, taking into account mitigation integrated into both the Plan and the Dún Laoghaire-Rathdown County Development Plan 2022-2028 – see Section 6.

Environmental impacts which occur will be determined by the nature and extent of multiple or individual projects and site-specific environmental factors. Environmental impacts which occur will be determined by the nature and extent of multiple or individual projects and site-specific environmental factors. Strategic Environmental Objective (SEO) codes are taken from Table 3.1.

Appropriate Assessment (AA) Screening and Stage 2 AA has been undertaken alongside the preparation of the Plan. The requirement for AA is provided under the EU Habitats Directive (Directive 1992/43/EEC). As part of the AA Screening process, the Council determined that it could not be excluded, on the basis of objective information, that the emerging Draft Plan, individually, or in combination with other plans and projects would have a likely adverse effect on the integrity of a European Site. Therefore, Stage 2 AA was required. The conclusion of the Stage 2 AA is that, following the application of mitigation, the Plan will not affect the integrity of the European Sites, alone or in combination with other plans or projects.³⁰

A Strategic Flood Risk Assessment (SFRA) document accompanies this SEA Environmental Report and the Plan. Requirements in relation to SFRA are provided under 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (Department of Environment and Office of Public Works, 2009) and associated Department of the Environment, Community and Local Government Circular PL2/2014. Flood risk management and drainage provisions are already in force through the Dún Laoghaire-Rathdown County Development Plan 2022-2028 and related provisions have been integrated into the LAP.

³⁰ 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.

SEA Environmental Report Appendix II: Non-Technical Summary Table 5.1 Overall Findings — Environmental Effects arising from Plan Provisions

Environmental Component	Effects include in-combination effects that are planned for through the wider plannir	cts, in combination with the wider planning framework g framework including the NPF and associated NDP 2018, the Eastern and Mic Plan and adjacent Development Plans and lower-tier land use plans	lland RSES, the Dún Laoghaire-Rathdown	SEO Codes
	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non- Significant Effects	
Biodiversity and Flora and Fauna	 Contribution towards protection of ecology (including designated sites, ecological connectivity, habitats) by facilitating development of lands (including those within and adjacent to the Plan area's existing built-up footprint) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the County and beyond. Contribution towards the maintenance of existing green infrastructure and associated ecosystem services, listed species, ecological connectivity and non-designated habitats. Contribution towards protection and/or maintenance of biodiversity and flora and fauna by contributing towards the protection of natural capital including the environmental vectors of air, water and soil. Biodiversity and flora and fauna includes biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species (including birds and bats), listed/protected species, ecological connectivity and non-designated habitats (including terrestrial and aquatic habitats), and disturbance to biodiversity and flora and fauna – including terrestrial and aquatic biodiversity and flora and fauna. 	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 such as birds and bats.	 Loss of an extent of non-protected habitats and species arising from the replacement of semi-natural land covers with artificial surfaces. Losses or damage to ecology (these would be in compliance with relevant legislation). 	BFF
Population and Human Health	 Promotion of economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management. Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands (including those within and adjacent to the Plan area's existing built-up footprint) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere in the County and beyond Contribution towards the protection of human health by facilitating development of lands (including those within and adjacent to the Plan area's existing built-up footprint) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the County and beyond. Contributes towards protection of human health as a result of contributing towards the protection of natural capital including environmental vectors, including air and water. 	Potential adverse effects arising from flood events. Potential interactions if effects arising from environmental vectors.	Potential interactions with residual effects on environmental vectors – please refer to residual adverse effects under "Soil", "Water" and "Air and Climatic Factors" below.	РНН

Environmental	SEA Environmental Report Appendix II: Non-Technical Summary tal Environmental Effects, in combination with the wider planning framework SEA Environmental Report Appendix II: Non-Technical Summary				
Component	Effects include in-combination effects that are planned for through the wider planning framework including the NPF and associated NDP 2018, the Eastern and Midland RSES, the Dún Laoghaire-Rathdown				
•		Plan and adjacent Development Plans and lower-tier land use plans		4	
	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non- Significant Effects		
Soil	Contribution towards the protection of soils by facilitating development of lands (including those within and adjacent to the Plan area's existing built-up footprint) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the County and beyond.	 Potential adverse effects on the hydrogeological and ecological function of the soil resource. Potential for riverbank erosion. 	 Loss of an extent of soil function arising from the replacement of semi-natural land covers with artificial surfaces. Riverbank erosion will continue to occur naturally over time and is likely to be enhanced by climate change 	S	
Water	 Contribution towards the protection of water by facilitating development of lands (including those within and adjacent to the Plan area's existing built-up footprint) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the County and beyond. Contributions towards the protection of water resources including the status of surface and groundwaters and water-based designations. Contribution towards flood risk management and appropriate drainage. 	 Potential adverse effects upon the status of water bodies and entries to the WFD Register of Protected Areas (ecological and human value), arising from changes in quality, flow and/or morphology. Increase in flood risk and associated effects associated with flood events. 	 Any increased loadings as a result of development to comply with the River Basin Management Plan. Flood related risks remain due to uncertainty with regard to extreme weather events – however such risks will be mitigated by measures that have been integrated into the Plan. 	W	
Material Assets	 Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands (including those within and adjacent to the Plan area's existing built-up footprint) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere in the County and beyond. Contribution towards compliance with national and regional water services and waste management policies. Contribution towards increase in renewable energy use by facilitating renewable energy and electricity transmission infrastructure developments. Contribution towards limits in increases in energy demand from the transport sector by facilitating sustainable compact growth. Contribution towards reductions in average energy consumption per capita including promoting energy efficient buildings, retrofitting, smart buildings, cities and grids. 	 Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity ensures the mitigation of potential conflicts). Failure to adequately treat surface water run-off that is discharged to water bodies (water services infrastructure and capacity ensures the mitigation of potential conflicts). Failure to comply with drinking water regulations and serve new development with adequate drinking water (water services infrastructure and capacity ensures the mitigation of potential conflicts). Increases in waste levels. Potential impacts upon public assets and infrastructure. 	 Exceedance of capacity in critical infrastructure risks remain, including due to uncertainty with regard to climate – however, such risks will be mitigated by: measures, including those requiring the timely provision of critical infrastructure, and compliance with the Water Framework Directive and associated River Basin Management Plan. Residual wastes to be disposed of in line with higher-level waste management policies. Any impacts upon public assets and infrastructure to comply with statutory planning/consent-granting framework. 	MA	

Environmenta Component	Environmental Effects, Effects include in-combination effects that are planned for through the wider pla Rathdown County Development 2022-2	2028 Plan and adjacent Development Plans and lower-tier land use plans		SEO Codes
	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non- Significant Effects	
Air and Climatic Factors	 Contribution towards climate mitigation and adaptation by facilitating compact development of lands (including those within and adjacent to the Plan area's existing built-up footprint) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere in the County and beyond. In combination with other plans, programmes etc., contribution towards the objectives of the wide policy framework relating to climate mitigation and adaptation, and associated contribution towards maintaining and improving air quality and managing noise levels, including through measures relating to: Sustainable compact growth; Sustainable mobility, including walking, cycling and public transport; Drainage, flood risk management and resilience; Sectors including agriculture, residential heating and infrastructure; Sustainable infrastructure design solutions including energy efficient buildings and green infrastructure. 	 Potential conflict between development under the Plan and aiming to reduce carbon emissions in line with local, national and European environmental objectives. Potential conflicts between transport emissions, including those from cars, and air quality. Potential conflicts between increased frequency of noise emissions and protection of sensitive receptors. Potential conflicts with climate adaptation measures including those relating to flood risk management. 	An extent of travel related greenhouse gas and other emissions to air. This has been mitigated by provisions which have been integrated into the Plan, including those relating to sustainable compact growth and sustainable mobility. Interactions between noise emissions and sensitive receptors. Various provisions have been integrated into the Plan to ensure that noise levels at sensitive receptors will be minimised.	AC
Cultural Heritage	 Contributes towards protection of cultural heritage elsewhere in the County by facilitating development within and adjacent to the Plan area's existing built-up footprint. Contributes towards protection of cultural heritage within and adjacent to the Plan area's existing built-up footprint by facilitating brownfield development and regeneration. 	 Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities. 	Potential effects on known architectural and archaeological heritage and unknown archaeology however, these will occur in compliance with legislation.	СН
Landscape	Contributes towards protection of wider landscape and landscape designations by facilitating development within and adjacent to the Plan area's existing built-up footprint.	Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape.	Landscapes will change overtime as a result of natural changes in vegetation cover combined with new developments that will occur in compliance with the Plan's landscape protection measures.	L

Section 6 Mitigation and Monitoring Measures

6.1 Mitigation

Mitigation measures are measures envisaged to prevent, reduce and, as fully as possible, offset any significant adverse impacts on the environment of implementing the Plan. Various environmental sensitivities and issues have been communicated to the Council through the SEA, Appropriate Assessment (AA) and Strategic Flood Risk Assessment (SFRA) processes. By integrating all related recommendations into the Plan, the Council have ensured that both the beneficial environmental effects of implementing the Plan have been and will be maximised and that potential adverse effects have been and will be avoided, reduced or offset.

Mitigation was achieved through:

- Strategic work undertaken by the Council to ensure contribution towards environmental protection and sustainable development³¹;
- Considering alternatives for the Plan³²;
- The integration of environmental considerations into the Plan's Urban Framework and Site Development Frameworks³³;
- The integration of individual SEA, AA and SFRA provisions into the text of the Plan; and
- The integration of individual provisions into the text of the County Development Plan.

6.2 Monitoring

The SEA Directive requires that the significant environmental effects of the implementation of plans and programmes are monitored. Monitoring is based around indicators that allow quantitative measures of trends and progress over time relating to the Strategic Environmental Objectives identified at Table 3.1 and used in the evaluation.

Given the position of the Local Area Plan in the land use planning hierarchy beneath the Dún Laoghaire-Rathdown County Development Plan 2022-2028, the measures identified in that County Development Plan SEA have been used as they are or having been slightly modified — in most instances. This consistency across the hierarchy of land use plans will improve the efficiency and effectiveness of future monitoring.

Monitoring indicators, targets, sources and remedial action is provided at Table 6.1. These measures can be considered and used as appropriate when it comes to monitoring the likely significant effects of implementing the Plan. The indicators may be updated over time, as new requirements and information emerge, for example. Reporting may be undertaken in conjunction with the monitoring reporting on other plans, such as the County Development Plan and other Local Area Plans.

³¹ In advance of the placing of the Draft Plan on public display, Dún Laoghaire-Rathdown County Council undertook various works in order to inform the preparation of the Plan. This included a detailed population analysis and preparation of an Area Based Transport Analysis, which has informed the draft Plan.

The findings of this strategic work have been integrated into the Plan and will contribute towards both environmental protection and management and sustainable development.

The undertaking of this SEA process was part of this strategic work and contributed towards the integration of environmental considerations into individual Plan provisions.

³² Although strategic alternatives in relation to the content of the Plan were guided by higher level planning objectives, as part of the Plan preparation/SEA process, the Council considered a number of alternatives for the Plan. These alternatives were assessed by the SEA process and the findings of this assessment informed the selection of preferred alternatives, facilitating an informed choice with respect to the type of Plan that was prepared, placed on public display and adopted.

³³ Environmental considerations, including those relating to sustainable and compact growth, sustainable mobility, sustainable infrastructure, flood risk, landscape, views and architectural heritage, were integrated into the Plan's Urban Framework and Site Development Frameworks through an interdisciplinary approach. The Plan seeks to achieve sustainable and compact growth, taking into account the various requirements set out in the higher-level NPF, Eastern and Midland RSES and Dún Laoghaire-Rathdown County Development Plan 2022-2028.

Table 6.1 Indicators, Targets, Sources and Remedial Action

Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action
Biodiversity, Flora and Fauna	BFF	Condition of European sites	Require all local level land use plans to include ecosystem services and green/blue infrastructure provisions in their land use plans and as a minimum, to have regard to the required targets in relation to the conservation of European sites, other nature conservation sites, ecological networks, and protected species Complete the review of the Dún Laoghaire-Rathdown Biodiversity Plan 2009-2013 and implement the revised Plan	Department of Housing, Local Government and Heritage report of the implementation of the measures contained in the Habitats Directive - as required by Article 17 of the Directive (every 6 years). Department of Housing, Local Government and Heritage's National Birds Directive Monitoring Report for the under Article 12 (every 6 years) Consultations with the NPWS	Where condition of European sites is found to be deteriorating this will be investigated with the Regional Assembly and the DHLGH to establish if the pressures are related to Plan actions / activities. A tailored response will be developed in consultation with these stakeholders in such a circumstance.
		Number of spatial plans that have included ecosystem services content, mapping and policy to protect ecosystem services when their relevant plans are either revised or drafted	 Require all local level land use plans to include ecosystem services and green/blue infrastructure provisions in their land use plans and as a minimum, to have regard to the required targets in relation to the conservation of European sites, other nature conservation sites, ecological networks, and protected species Complete the review of the Dún Laoghaire-Rathdown Biodiversity Plan 2009-2013 and implement the revised Plan 	Internal review of local land use plans	Review internal systems
		SEAs and AAs as relevant for new Council policies, plans, programmes etc. Status of water quality in the	Screen for and undertake SEA and AA as relevant for new Council policies, plans, programmes etc. Included under Water below	Internal monitoring of preparation of local land use plans Included under Water below	Review internal systems Included under Water below
		County's water bodies Compliance of planning permissions with Plan measures providing for the protection of Biodiversity and flora and fauna see Chapter 8 "Green Infrastructure and Biodiversity" of the County Development Plan	For planning permission to be only granted when applications demonstrate that they comply with all Plan measures providing for the protection of biodiversity and flora and fauna – see Chapter 8 "Green Infrastructure and Biodiversity" of the County Development Plan	Internal monitoring of likely significant environmental effects of grants of permission	Review internal systems
Population and Human Health	РНН	Implementation of Plan measures relating to the promotion of economic growth as provided for by Chapter 6 "Enterprise and Employment Strategy" of the County Development Plan	For review of progress on implementing Plan objectives to demonstrate successful implementation of measures relating to the promotion of economic growth as provided for by Chapter 6 "Enterprise and Employment Strategy" of the County Development Plan By 2020 all citizens will have access to speeds of 30Mbps, and that 50% of citizens will be subscribing to speeds of 100Mbps (Also relevant to Material Assets)	Internal review of progress on implementing Plan objectives Consultations with Department of Environment, Climate and Communications	Review internal systems Consultations with Department of Environment, Climate and Communications

Environmental	SEO Code	Indicators	Targets	Sources	Remedial Action
Component		Number of spatial concentrations of health problems arising from environmental factors resulting from development permitted under the Plan	No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan	Consultations with the Health Service Executive and EPA	Consultations with the Health Service Executive and EPA
		Proportion of people reporting regular cycling / walking to school and work above previous CSO figures	Increase in the proportion of people reporting regular cycling / walking to school and work above previous CSO figures	CSO data Monitoring of the Dún Laoghaire Rathdown County Council's Climate Change Action Plan 2019-2024	Where proportion of population shows increase in private car use above previous CSO figures, the Council will coordinate with the Regional Assembly, the DHLGH, DECC and NTA to develop a tailored response.
		Number of spatial plans that include specific green infrastructure mapping	 Require all local level land use plans to include specific green infrastructure mapping 	Internal review of local land use plans	Review internal systems
Soil (and Land)	S	Proportion of population growth occurring on infill and brownfield lands compared to greenfield (also relevant to Material Assets)	 Maintain built surface cover nationally to below the EU average of 4% as per the NPF Achieve the 50% target for all new homes within and adjacent to the existing built-up footprint of Dún Laoghaire-Rathdown To map brownfield and infill land parcels across the County. 	 Environmental Protection Agency (EPA), Geoportal Compilation of greenfield and brownfield development for the Department of Housing, Local Government and Heritage AA/Screening for AA for each application 	Where the proportion of growth on infill and brownfield sites is not keeping pace with the targets set in the NPF and the RSES, the Council will liaise with the Regional Assembly to establish reasons and coordinate actions to address constraints to doing so.
		Instances where contaminated material generated from brownfield and infill must be disposed of	 Dispose of contaminated material in compliance with EPA guidance and waste management requirements 	Internal review of grants of permission where contaminated material must be disposed of	Consultations with the EPA and Development Management
		Environmental assessments and AAs as relevant for applications for brownfield and infill development prior to planning permission	 Screen for and undertake environmental assessments and AA as relevant for applications for brownfield and infill development prior to planning permission 	Internal monitoring of grants of permission	Review internal systems
Water	W	Status of water bodies as reported by the EPA Water Monitoring Programme for the WFD	 Not to cause deterioration in the status of any surface water or affect the ability of any surface water to achieve 'good status' Implementation of the objectives of the second cycle of the River Basin Management Plan by 2021 (and subsequent iterations as relevant) 	EPA Monitoring Programme for WFD compliance	 Where water bodies are failing to meet at least good status this will be investigated with the DHLGH Water Section, the EPA Catchment Unit, the Regional Assembly and, as relevant, Uisce Éireann to establish if the pressures are related to Plan actions / activities. A tailored response will be developed in consultation with these stakeholders in such a circumstance. Where marine water bodies are failing to meet good ecological status, this will be interrogated with the Marine Institute and the DHLGH to establish if the pressures are related to RSES activities. A tailored response will be developed in consultation with the Marine Institute and DHLGH in such a circumstance. Where planning applications are rejected due to insufficient capacity in the Wastewater treatment Plant (WWTP) or failure of the WWTP to meet Emission Limit Values, the Council will consider

Environmental Component	SEO Code	Indicators	SEA Environmental Report Appendix II: Targets	Sources	Remedial Action
Component					whether it is necessary to coordinate a response with the EMRA, EPA and Uisce Éireann to achieve the necessary capacity.
		Number of incompatible developments permitted within flood risk areas	Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk	Internal monitoring of likely significant environmental effects of grants of permission	Where planning applications are being permitted on flood zones, the Council will ensure that such grants are in compliance with the Flood Risk Management Guidelines and include appropriate flood risk mitigation and management measures.
Material Assets	MA	Programmed delivery of Uisce Éireann infrastructure for all key growth towns in line with Uisce Eireann Investment Plan and prioritisation programme to ensure sustainable growth can be accommodated Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the Plan	 All new developments granted permission to be connected to and adequately and appropriately served by waste water treatment over the lifetime of the Plan Where septic tanks are proposed, for planning permission to be only granted when applications demonstrate that the outfall from the septic tank will not – incombination with other septic tanks—contribute towards any surface or ground water body not meeting the objective of good status under the Water Framework Directive Facilitate, as appropriate, Uisce Éireann in developing water and wastewater infrastructure See also targets relating to greenfield and brownfield development of land under Soil and broadband under Population and Human Health 	Internal monitoring of likely significant environmental effects of grants of permission Consultations with the Uisce Éireann Department of Housing, Local Government and Heritage in conjunction with Local Authorities	Where planning applications are rejected due to insufficient capacity in the Wastewater treatment Plant (WWTP) or failure of the WWTP to meet Emission Limit Values, the Council will consider whether it is necessary to coordinate a response with the EMRA, EPA and Uisce Éireann to achieve the necessary capacity.
		Proportion of people reporting regular cycling / walking to school and work above previous CSO figures	Increase in the proportion of people reporting regular cycling / walking to school and work above previous CSO figures	CSO data Monitoring of the Dún Laoghaire Rathdown County Council's Climate Change Action Plan 2019-2024	 Where proportion of population shows increase in private car use above previous CSO figures, the Council will coordinate with the Regional Assembly, the DHLGH, DECC and NTA to develop a tailored response.
Air	A	Proportion of journeys made by private fossil fuel-based car compared to previous National Travel Survey levels NOx, SOx, PM10 and PM2.5 as part of Ambient Air Quality Monitoring	 Decrease in proportion of journeys made by private fossil fuel-based car compared to previous National Travel Survey levels Improvement in Air Quality trends, particularly in relation to transport related emissions of NO_x and particulate matter 	CSO data Data from the National Travel Survey EPA Air Quality Monitoring Consultations with Department of Transport and Department of Environment, Climate and Communications	Where proportion of population shows increase in private car use above previous CSO figures, Council will coordinate with the Regional Assembly, DHLGH, DECC and NTA to develop a tailored response. See also entry under Population and human health above

Environmental	SEO	Indicators	SEA Environmental Report Appendix II: Targets	Sources	Remedial Action
Component	Code		-		
Climatic Factors ³⁴	С	Implementation of Plan measures relating to climate reduction targets as provided for by Plan provisions including those provided for and referenced in Chapter 3 "Climate Action" of the County Development Plan	• For review of progress on implementing Plan objectives to demonstrate successful implementation of measures climate reduction targets as provided for by Plan provisions including those provided for and referenced in Chapter 3 "Climate Action" of the County Development Plan	 Internal monitoring of likely significant environmental effects of grants of permission 	Review internal systems
		A competitive, low-carbon, climate-resilient and environmentally sustainable economy Share of renewable energy in transport	 Contribute towards transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050 Contribute towards the target of the Renewable Energy Directive (2009/28/EC), for all Member States to reach a 10% share of renewable energy in transport by facilitating the development of electricity charging and transmission infrastructure, in compliance with the provisions of the Plan 	 Monitoring of the Dún Laoghaire Rathdown County Council's Climate Change Action Plan 2019-2024 EPA Annual National Greenhouse Gas Emissions Inventory reporting Climate Action Regional Office Consultations with Department of Environment, Climate and Communications (at monitoring 	Where targets are not achieved, the Council will liaise with the Regional Assembly and the Dublin Climate Action Regional Office to establish reasons and develop solutions.
		Carbon dioxide (CO ₂) emissions across the electricity generation, built environment and transport sectors Energy consumption, the uptake of renewable options and solid fuels for residential heating	 Contribute towards the target of aggregate reduction in carbon dioxide (CO₂) emissions across the electricity generation, built environment and transport sectors To promote reduced energy consumption and support the uptake of renewable options and a move away from solid fuels for residential heating 	evaluation)	
		Proportion of journeys made by private fossil fuel-based car compared to previous levels	Decrease in the proportion of journeys made by residents of the County using private fossil fuel-based car compared to previous levels	 CSO data Monitoring of the Dún Laoghaire Rathdown County Council's Climate Change Action Plan 2019-2024 	Where trends toward carbon reduction are not recorded, the Council will liaise with the Regional Assembly and the Dublin Climate Action Regional Office to establish reasons and develop solutions.
		Proportion of people reporting regular cycling / walking to school and work above previous CSO figures	Increase in the proportion of people reporting regular cycling / walking to school and work above previous CSO figures	CSO data Monitoring of the Dún Laoghaire Rathdown County Council's Climate Change Action Plan 2019-2024	Where proportion of population shows increase in private car use above previous CSO figures, the Council will coordinate with the Regional Assembly, the DHLGH, DECC and NTA to develop a tailored response.

³⁴ Targets under the national Climate Action Plan are reviewed and updated periodically and include those under the headings of Electricity, Built Environment, Transport, Agriculture, Forestry & Land Use and Enterprise. CAAS for Dún Laoghaire-Rathdown County Council

		SEA Environmental Report Appendix II:	,	
	Indicators	Targets	Sources	Remedial Action
Coue				
СН	 Percentage of entries to the 	 Protect entries to the Record of Monuments 	 Internal monitoring of likely 	Where monitoring reveals visitor or development
	Record of Monuments and	and Places, and the context of these entries	significant environmental effects	pressure is causing negative effects on designated
	Places, and the context these	within the surrounding landscape where	of grants of permission	archaeological or architectural heritage, the
	entries within the surrounding	relevant, from adverse effects resulting		Council will work with Regional Assembly, Fáilte
	landscape where relevant,	from development which is granted		Ireland and the National Monuments Service and
	protected from adverse effects	permission under the Plan		other stakeholders, as relevant, to address
	resulting from development	•		pressures through additional mitigation.
	which is granted permission			,
	under the Plan			
	Percentage of entries to the	Protect entries to the Record of Protected	Consultation with Department of	
	Record of Protected Structures	Structures and Architectural Conservation	Housing, Local Government and	
	and Architectural Conservation	Areas and their context from significant	Heritage.	
	Areas and their context	adverse effects arising from new	_	
	protected from significant	development granted permission under the		
	adverse effects arising from new	Plan		
	development granted permission			
	under the Plan			
L	Number of developments	No developments permitted which result in	Internal monitoring of likely	Where monitoring reveals developments
	permitted that result in avoidable		, ,	permitted which result in avoidable adverse visual
	adverse visual impacts on the	landscape, especially with regard to	_	impacts on the landscape, the Council will re-
			3 3 3 4 4 4 3 3 3	examine Plan provisions and the effectiveness of
		, ,		their implementation
	designations included in Land	development which is granted permission		·
	Use Plans, resulting from	under the Plan		
	development which is granted			
	SEO Code CH	COME Percentage of entries to the Record of Monuments and Places, and the context these entries within the surrounding landscape where relevant, protected from adverse effects resulting from development which is granted permission under the Plan Percentage of entries to the Record of Protected Structures and Architectural Conservation Areas and their context protected from significant adverse effects arising from new development granted permission under the Plan Number of developments permitted that result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in Land Use Plans, resulting from	FEO Code CH Percentage of entries to the Record of Monuments and Places, and the context these entries within the surrounding landscape where relevant, protected from adverse effects resulting from development which is granted permission under the Plan Percentage of entries to the Record of Monuments and Places, and the context of these entries within the surrounding landscape where relevant, protected from adverse effects resulting from development which is granted permission under the Plan Percentage of entries to the Record of Protected Structures and Architectural Conservation Areas and their context protected from significant adverse effects arising from new development granted permission under the Plan Protect entries to the Record of Protected Structures and Architectural Conservation Areas and their context from significant adverse effects arising from new development granted permission under the Plan Protect entries to the Record of Protected Structures and Architectural Conservation Areas and their context from significant adverse effects arising from new development granted permission under the Plan Protect entries to the Record of Protected Structures and Architectural Conservation Areas and their context from significant adverse effects arising from new development granted permission under the Plan Number of developments permitted which result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in Land Use Plans, resulting from development which is granted permission under the Plan	Targets Sources