



**Strategic
Environmental
Assessment**
Environmental Report
for Proposed Amendments

STRATEGIC ENVIRONMENTAL ASSESSMENT ENVIRONMENTAL REPORT

FOR

RELEVANT PROPOSED MATERIAL ALTERATIONS

TO THE

DRAFT

**DÚN LAOGHAIRE-RATHDOWN
COUNTY DEVELOPMENT PLAN 2022-2028**

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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List of Abbreviations

AA	Appropriate Assessment
ACA	Architectural Conservation Area
CAFE	Cleaner Air for Europe
CFRAM	Catchment Flood Risk Assessment and Management
CORINE	Co-ORDinated INformation on the Environment
CSO	Central Statistics Office
DART	Dublin Area Rapid Transit
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 Organisation
WFD	Water Framework Directive
WWTP	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 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 Draft Plan, the alternatives and the Proposed Material Alterations 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 relevant Proposed Material Alterations to the Draft Dún Laoghaire-Rathdown County Development Plan 2022-2028. 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 Proposed Material Alterations.

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 and 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 is being undertaken in order to comply with Section 12 of the Planning and Development Act, as amended.

1.2 Implications for the Planning Authority

The Proposed Material Alterations were screened for the need to undertake SEA. Certain Proposed Material Alterations were determined as requiring full SEA. The SEA Screening Determination accompanies this SEA Environmental Report and the Proposed Material Alterations document. Appendix II to this SEA Environmental Report comprises the SEA Screening Report that was prepared to inform the SEA Screening Determination.

This SEA Environmental Report provides the findings of the assessment and will be placed on public display alongside the Proposed Material Alterations. The Elected Members will be required to take account of this document, the Proposed Material Alterations and any submissions received on these after public display.

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 County.

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

An overlay of environmental sensitivities is shown on Figure 1.1.

The overlay mapping shows that environmental sensitivities are not evenly distributed throughout the County. Most of the County is identified as having low to moderate levels of sensitivity.

The most sensitive areas in the County include:

- Parts of the rural areas in the south west of the County, on account of the High Amenity Area designation, archaeological heritage sensitivities, areas of extreme and high groundwater vulnerability and European Site ecological designations along the borders with South Dublin and Wicklow County Councils;
- Parts of the coastline and adjacent coastal areas, on account of European Site and proposed Natural Heritage Area ecological designations, Protected Views and Prospects, extreme groundwater vulnerability and coastal flood risk;
- Certain locations and areas within the existing built-up footprint of the County, on account of cultural heritage designations, including entries to the Record of Monuments and Places, Entries

- to the Record of Protected Structures and Architectural Conservation Areas; and
- Certain areas that are adjacent to streams and rivers, on account of flood risk.

The Draft Plan to which the Proposed Material Alterations relate directs incompatible development away from the most sensitive areas in the County and focuses on directing: compact, sustainable development within and adjacent to the existing built-up footprint; and sustainable development elsewhere, including in the rural area of the County. Development of areas within and adjacent to the existing built-up footprint, which are generally more robust, better serviced and better connected, will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation.

Compact development can be accompanied by placemaking initiatives to enable the County's settlements to become more desirable places to live – so that they can sustainably accommodate new residents and maintain and improve services to existing and future communities.

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

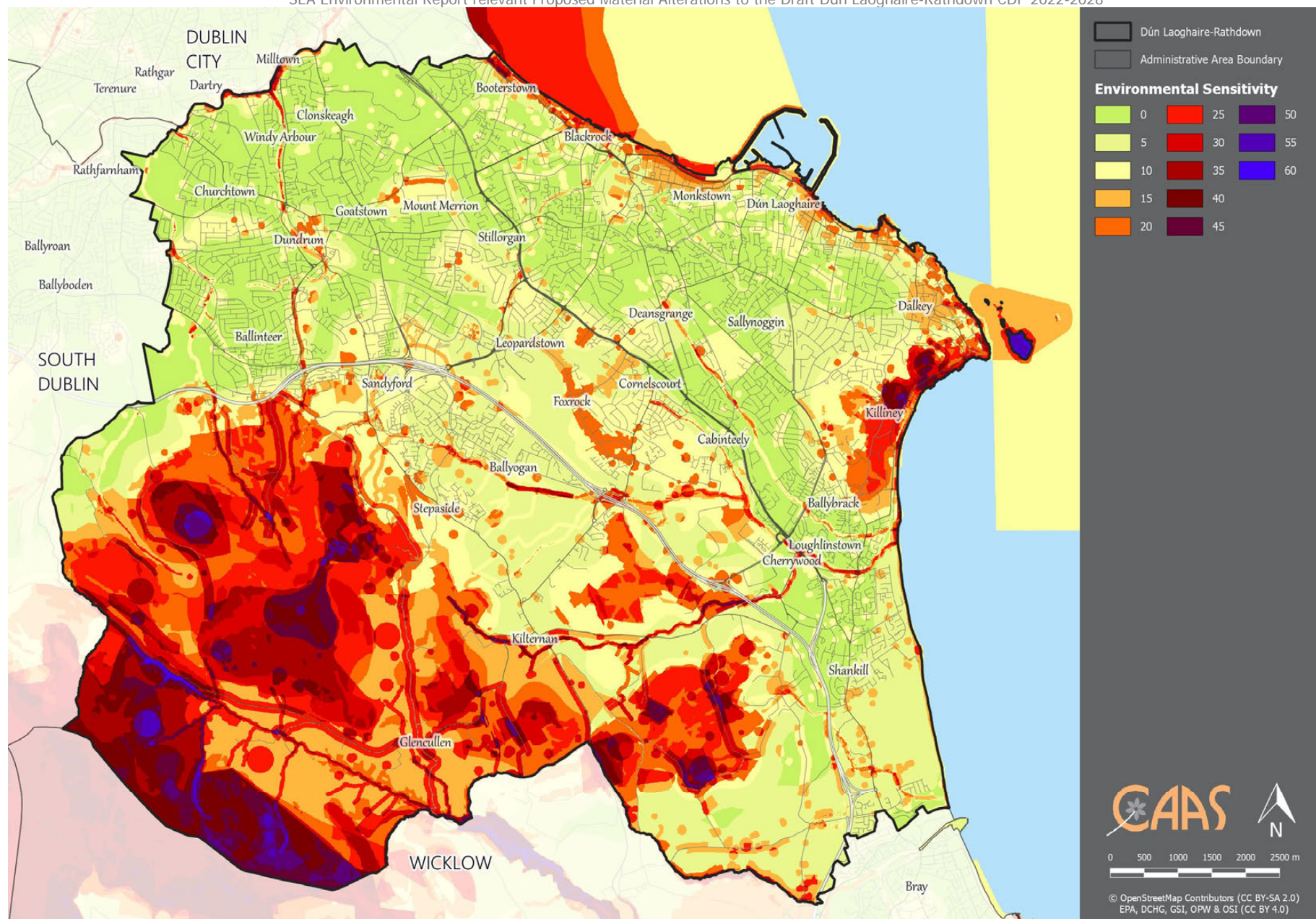


Figure 1.1 Environmental Sensitivities Map

Section 2 The Draft Plan and associated Proposed Material Alterations

2.1 Introduction

The Dún Laoghaire-Rathdown County Development Plan is a land use plan and overall strategy for the proper planning and sustainable development of the functional area of County Dún Laoghaire-Rathdown over the six-year period 2022-2028. Not later than four years after the adoption of the Plan, the Council is required to review it and commence the preparation of a new Plan.

2.2 Content of the Plan

The Plan includes a Written Statement, that provides the development policies, Core Strategy and mandatory and discretionary objectives for different policy areas addressed by the Development Plan. The Written Statement is divided into 15 separate chapters setting out various policies and objectives under the headings of:

- Chapter 1: Introduction, Vision and Context
- Chapter 2: Core Strategy
- Chapter 3: Climate Action
- Chapter 4: Neighbourhoods, People, Place and Homes
- Chapter 5: Transport and Mobility
- Chapter 6: Enterprise and Employment
- Chapter 7: Towns, Villages and Retail Development
- Chapter 8: Green Infrastructure and Biodiversity
- Chapter 9: Open Space and Recreation
- Chapter 10: Environmental Infrastructure
- Chapter 11: Heritage
- Chapter 12: Development Management
- Chapter 13: Land Use Zoning Objectives
- Chapter 14: Specific Local Objectives
- Chapter 15: Implementation, Monitoring and Evaluation

The Written Statement is accompanied by Land Use Zoning Maps, this SEA Environmental Report, a Natura Impact Report, a Strategic Flood Risk Assessment and other supporting appendices.

2.3 Overall Vision and Strategy County Outcomes

The Vision of the Plan is: *‘to embrace inclusiveness, champion quality of life through healthy placemaking, grow and attract a diverse innovative economy and deliver this in a manner that enhances our environment for future generations.’*

To deliver on the Development Plan Vision over the lifetime of the Plan there are a number of key cross cutting and interrelated themes or Strategic County Outcomes which underpin the Plan as follows:

1. Creation of a climate resilient County;
2. Creation of a compact and connected County;
3. Creation of a liveable network of towns and villages;
4. Creation of an inclusive and healthy County; and
5. Creation of a vibrant economic County.

2.4 Proposed Material Alterations

The Proposed Material Alterations are outlined in detail in the accompanying Proposed Material Alteration document. The “Alteration References” provided in this report can be used to locate this detail in the accompanying Proposed Material Alteration document.

Alterations proposed include those relating to text and to maps.

The Proposed Material Alterations were screened for the need to undertake SEA and the alterations below were determined as requiring full SEA. The SEA Screening Determination accompanies this SEA Environmental Report and the Proposed Material Alterations document. Appendix II to this SEA Environmental Report comprises the SEA Screening Report that was prepared to inform the Determination. Proposed Material

Alterations requiring SEA and consideration in this SEA Environmental Report¹ are as follows:

Alteration Ref:
No. 83
No. 84
No. 208
No. 218
No. 265
No. 269
No. 306
No. 314
No. 316
No. 356
No. 357
Map No. 9 Mapping Amendment M911 - to add Strategic Land Reserve at Kiltiernan

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

Far in advance of both the submission of the Chief Executive's Draft Plan to the Elected Members for approval and the placing of the Draft Plan on public display, Dún Laoghaire-Rathdown County Council undertook various background work in order to inform the preparation of 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 within the County.

Strategic work undertaken by the Council includes background work in relation to Plan Strategies and other provisions for a variety of sectors, including:

- Climate Action;
- Transport and Mobility;
- Green Infrastructure;
- Infrastructure Assessment;
- Housing Strategy and Interim Housing Needs Demand Assessment;
- Building Height Strategy;

- Waste Management Guidelines;
- Green Roofs;
- Stormwater Management Policy
- Interim to Dun Laoghaire Urban Framework Plan;
- Background Paper for the SLR for Old Connaught;
- Landscape Character Areas;
- Wind Energy Strategy;
- Dún Laoghaire Urban Framework Plan;
- Sandyford Urban Framework; and
- Record of Protected Structures.

The undertaking of this SEA process and associated Appropriate Assessment and Strategic Flood Risk Assessment processes were 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.

2.6 Relationship with other relevant Plans and Programmes

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

The Draft Plan, to which the Proposed Material Alterations relate, 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 will, in turn, guide lower level strategic actions. These documents include plans and programmes such as those detailed in Appendix I² (see also, Section 4 "Environmental Baseline", Section 5 "Strategic Environmental Objectives", Section 6 "Description of 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 (RSEs) and lower tier Development Plans and

¹ For detail please refer to Proposed Material Alterations document.

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 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.

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 County Development Plan.

As required by the Planning and Development Act 2000, as amended, the Draft County Development Plan is consistent with and conforms with national and regional policies, plans and programmes, including the NPF and the RSES for the Eastern and Midland Region. The County Development Plan may, in turn, guide lower level strategic actions, such as the Local Area Plans that will be subject to their own lower-tier environmental assessments.

In order to be realised, projects included in the County Development 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 SEA Methodology

3.1 Introduction to the Iterative Approach

The preparation of the Draft Plan, Proposed Material Alterations, SEA, AA and SFRA have taken place concurrently and the findings of the SEA, AA and SFRA have informed the Plan. The process is currently at a stage where the findings of this report will be placed on public display as part of the required statutory public consultations. An AA Natura Impact Report will also accompany the Proposed Material Alterations on public display. Submissions made on the Proposed Material Alterations and associated documents, including SEA and AA documents, will be responded to and updates made to the documents where relevant.

When the Plan is finalised, the SEA, AA and SFRA documents will be finalised. Final documents will include an SEA Statement, which will include information on how environmental considerations were integrated into the Plan, and an AA Conclusion Statement. The Plan will be implemented and environmental monitoring – as well as planning and project development and associated environmental assessments and administrative consent of projects – will be undertaken.

3.2 Appropriate Assessment and Integrated Biodiversity Impact Assessment

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

The emerging conclusion of the AA is that the Plan will not affect the integrity of the European Sites, alone or in combination with other plans or projects³.

The preparation of the Plan, SEA and AA has taken place concurrently and the findings of the AA have informed the SEA. The Proposed Material Alterations are accompanied by an AA Natura Impact Report, which has informed this SEA Environmental Report.

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 and Proposed Material Alterations, all of 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, Proposed Material Alterations, SEA and AA have taken place concurrently and the findings of the AA have informed the SEA.

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 proceed; and (c) adequate compensatory measures in place.

3.3 Strategic Flood Risk Assessment

SFRA is being undertaken to inform the preparation of the Draft Plan and the Proposed Material Alterations. The SFRA process has informed this report.

The SFRA has considered the Proposed Material Alterations and finds that all Proposed Material Alterations comply with “The Planning System and Flood Risk Management Guidelines for Planning Authorities” (DEHLG/OPW, 2009).

3.4 Scoping

The scope of environmental issues to be dealt with by the SEA of the Plan 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 (as part of the SEA scoping process at pre-Draft Plan stage) 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.

Two SEA scoping submissions were received, one from the Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media and one from the Department of Agriculture, Food and the Marine. These submissions, and other submissions received as part of the initial consultation on the Draft Plan, influenced the scope of the assessment undertaken, the findings of which are included in this report.

3.5 Alternatives

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

3.6 Preparation of the Draft Plan and Members’ Amendments

The preparation of a Chief Executive’s Draft Plan, for the consideration of Members in advance of public display, was informed by the SEA, AA and SFRA processes.

The SEA and AA processes, in an iterative manner with input from Planning Team, allowed for the integration of environmental considerations into various amendments to the Chief Executive’s Draft Plan, including the possible provision of: an open seawater pool at the Dún Laoghaire Baths site (SLO 115); a cultural and heritage centre in the environs of the Dún Laoghaire Harbour (SLO 116); and a feasibility investigation of how the East Coast Cycle Trail could be integrated into any coastal protection works required between Corbawn Lane and the proposed DART station at Woodbrook (SLO 117).

Taking into account, inter alia, the advice on Motions and the SEA, AA and SFRA documentation for the Draft Plan, the Members agreed to amend the Chief Executive’s Draft Plan by resolution.

This SEA Environmental Report is an updated version of an earlier draft that has taken into account these amendments.

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: Department of Agriculture, Food and the Marine; Department of Tourism, Culture, Arts,

Gaeltacht, Sport and Media; Department of Housing, Planning and Local Government; Department of Environment, Climate and Communications; Environmental Protection Agency; Wicklow County Council; South Dublin County Council; and Dublin City Council.

3.7 Environmental Report

This SEA Environmental Report predicts and evaluates the likely significant effects of the Proposed Material Alterations and the alternatives.

The Environmental Report provides Dún Laoghaire-Rathdown County Council, stakeholders and the public with a clear understanding of the likely environmental consequences of implementing the Proposed Material Alterations.

Mitigation measures to prevent or reduce significant adverse effects posed by the Draft Plan, to which the Proposed Material Alterations relate, are identified in Section 9 – these have been integrated into the Plan.

This Environmental Report has been informed by recommendations contained in submissions to date. The SEA Environmental Report prepared for the Draft Plan will be finalised in advance of adoption of the Plan taking into account, among other things, the content of this SEA Environmental Report.

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

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

There is a data gap relating to WFD surface water status data. There are a number of waterbodies within the Plan area with overall status currently not assigned to them and the term “unassigned status” applies in respect of these waterbodies. The SEA ensured that the Plan contains measures that will contribute towards the maintenance and improvement of status of all water bodies within the zone of influence.

3.8 SEA Statement

On finalisation of the Plan, an SEA Statement will be prepared that will include 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 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 III 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.

Given the potential for impacts beyond the County boundary, the spatial scope of the SEA takes into account the zone of influence of the Plan area.

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.

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.

⁶ 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 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.

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

- Goal 3. Ensure healthy lives and promote well-being 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 including Material Alterations

In the absence of a new Plan it is uncertain how permission for new development would be applied for and considered.

The 2016-2022 Plan has contributed towards environmental protection within the County. If the 2016-2022 Plan was to expire and not be replaced by the 2022-2028 Plan, this would result in a deterioration of the County's planning and environmental protection framework. Although higher level environmental protection objectives – such as those of various EU Directives and transposing Irish Regulations – would still apply, the deterioration of this framework would mean that new development would be less coordinated and controlled.

As a result, there would be a decreased likelihood in the extent, magnitude and frequency of positive effects 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-served 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 long-established 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-served 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-served 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 (including those used for agriculture) and designated sites of geological heritage 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-served lands elsewhere in the County and beyond.

- Contribution towards the protection of the environment from contamination the highest standards of remediation, and where appropriate to consultations with the EPA and other relevant bodies, will be required to resolve any instances of environmental pollution created by contaminated land.
- Contribution towards the protection of water 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-served 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-served 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-served 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 County's existing built-up footprint.
- Contributes towards protection of cultural heritage within and adjacent to the County'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 County's existing built-up footprint.

As a result, there would be an increased likelihood in the extent, magnitude and frequency of adverse effects on all environmental components 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, including as a result of development on contaminated lands.
- Potential for riverbank and coastal 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 interactions at local level between agricultural waste and soil, water, biodiversity and human health - including nitrogen deposition as a result of agricultural activities. However, this is likely to be a less significant issue at County level due to low levels of intensive agriculture.

- 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

Dún Laoghaire-Rathdown's **natural capital** comprises its renewable and non-renewable 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 and recreation. Managing natural capital so that it can continue to deliver the ecosystem services that give us 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 woodland), sequester and store carbon in peatlands and improve soil quality.

In recognition of the need to manage natural capital, provisions have been integrated into the Plan that will contribute towards 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.

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 and fresh water. 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 gene-pools. Cultural services include non-material benefits that people obtain from ecosystems such as spiritual enrichment, intellectual development, recreation and aesthetic values⁷. The Ecosystems⁸ Services Approach followed by the Plan provides a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way.

Ecosystem Services Approach principles include:

- a) Consideration of natural systems - by using knowledge of interactions in nature and how ecosystems function (this has been considered in preparing Chapters including no. 3, 8, 9 and 10);
- b) Taking into account of the services that ecosystems provide - including those that underpin social and economic well-being, such as flood and climate regulation (this has been considered in preparing Chapters including no. 3 and 8) or recreation, culture and quality of life (this has been considered in preparing Plan Chapters including no. 9 and 11); and
- c) Involving people - those who benefit from the ecosystem services and those managing them need to be involved in decisions that affect them. Public consultation has informed the preparation of the Draft Plan which will be further refined before adoption, taking into account submissions/observations made on the Draft Plan during public display.

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

⁸ 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

4.6 Biodiversity and Flora and Fauna

4.6.1 Introduction

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

4.6.2 Overview of High Value Biodiversity and Designations

Green space, which makes up a large part of the southern portion of the County, consists of a variety of habitats including corridors that provide for the movement of wildlife. Green space within Dún Laoghaire-Rathdown is comprised of agricultural lands, bogs and heath in the uplands, woodlands, grasslands, Marlay Park, Deerpark, Cabinteely Park, Shanganagh Park and a number of other open spaces within and adjacent to the County's existing built footprint.

The Loughlinstown River, with tributaries such as the Shanganagh River and the Cabinteely, Ballyogan and the Glenamuck Streams, forms the largest catchment in Dún Laoghaire-Rathdown. The southernmost branch of the River, also known as Brides Glen stream, is particularly rich in biodiversity. Trout, otter, and bats occur in the river while kingfisher may also be present. Other rivers supporting good areas of biodiversity include the Little Dargle, which rises in Three Rock Mountain and flows through Marlay Park, and the Glencullen River, which drains the uplands around Glendoo and Glencullen Mountains before crossing the County boundary into County Wicklow.

The County's coastline, including areas such as South Dublin Bay and Dalkey, provides a number of habitats for a variety of species. The Shanganagh coastline represents a long stretch of the Killiney Bay shoreline, extending from Ballybrack to Bray in Wicklow. The area is important particularly for its sedimentary cliffs,

displaying clear geological time sequences through the quaternary period. The shoreline also has an example of a drowned forest, visible in the sand only at extreme low tide.

Dalkey Islands comprise the uninhabited islands of Dalkey Island, Lamb Island and Maidens' Rock. The islands contain important ecological, archaeological, architectural, and cultural heritage. The underlying rock is granite with rough terrain with rock outcrops, semi-natural grasslands, dense bracken framed by a rocky shoreline with low granite cliffs⁹. The Islands are a designated SPA (Dalkey Islands SPA) and SAC (Rockabill to Dalkey Island SAC) and form part of the Dalkey Coastal Zone and Killiney Hill pNHA.

The upland areas around Three Rock and Two Rock Mountains are valuable for their heath habitats and their exposed rocky outcrops. Red grouse, an upland bird species thought to be in decline across the country, occurs in this area.

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

Marshes are found on level ground near slow-flowing river banks and in other places where mineral or shallow peaty soils are waterlogged, and where the water table is close to ground level for most of the year and tend to be comparatively species-rich especially with herbs. Booterstown Marsh in the north-east of the Plan area is the only remaining area of saltmarsh in Dún-Laoghaire-Rathdown. The marsh is an important habitat for a range of species including birds, fish, invertebrates and rare plants. It is also of international importance as a roosting and feeding area for waders and wildfowl.¹⁰

⁹ *The Dalkey Islands Conservation Plan 2014-2024*

¹⁰ *Treasuring our Wildlife - Dún Laoghaire-Rathdown Biodiversity Plan 2009-2013.*

Ecological designations in Dún Laoghaire-Rathdown include:

- Special Protection Areas¹¹;
- Special Areas of Conservation¹²;
- Proposed Natural Heritage Areas¹³;
- Nature Reserves¹⁴;
- National Park¹⁵;
- Ramsar sites¹⁶;
- Certain entries to the Water Framework Directive Register of Protected Areas¹⁷;
- Salmonid River Regulations (S.I. 293 only)¹⁸;
- Wildfowl Sanctuary¹⁹;
- Flora Protection Order sites²⁰;
- Pollinator Areas²¹;
- Tree Preservation Orders (TPOs) and Trees, group of trees and woodlands²²;
- Ecological connectivity and networks;
- CORINE Landcover²³;
- Watercourses, wetlands and peatlands data;
- Other sites of high biodiversity value or ecological importance²⁴; and
- Control and management of invasive alien species.

The zone of influence of the Plan beyond the County area with respect to impacts upon ecology via surface waters upon ecological resources – including designated ecology – can be estimated to be areas within 15 km of the County boundary and all downstream areas of catchments which drain the County. Potential overlaps in designations and settlements/zoning and sites of importance to

birds associated with the zoning of lands adjacent to these sites have been also considered by the SEA and AA.

4.6.3 European Sites

European Sites in the County occur in the greatest concentrations along the coastline and in upland areas. European Sites comprise:

- Special Areas of Conservation²⁵ (SACs); and
- Special Protection Areas²⁶ (SPAs).

The SEA uses the same zone of influence cited in the AA, a 15 km buffer around the County. There are 24 European sites (fifteen SACs and nine SPAs) designated within this zone (mapped on Figure 4.1) out of which eight European sites (five SACs and three SPAs) are designated within, partially within or adjacent to the County and these include:

- South Dublin Bay SAC²⁷ (00210);
- Ballyman Glen SAC²⁸ (000713);
- Knocksink Wood SAC²⁹ (000725);
- Wicklow Mountains SAC³⁰ (002122);
- Rockabill to Dalkey Island SAC³¹ (003000);
- South Dublin Bay and River Tolka Estuary SPA³² (004024);
- Dalkey Islands SPA³³ (004172); and
- Wicklow Mountains SPA³⁴ (004040).

¹¹ For more detail refer to Section 4.6.3.

¹² For more detail refer to Section 4.6.3.

¹³ For more detail refer to Section 4.6.4.

¹⁴ For more details refer to Section 4.6.10.

¹⁵ For more details refer to Section 4.6.10.

¹⁶ For more detail refer to Section 4.6.10.

¹⁷ For more detail refer to Sections 4.6.7 and 4.9.7.

¹⁸ For more detail refer to Section 4.6.8.

¹⁹ Areas that have been excluded from the 'Open Season Order' so that game birds can rest and feed undisturbed. **There are no Wildfowl Sanctuaries within the Plan area, however the North Bull Island Wildfowl Sanctuary (WFS-19) is located approx. 6.5 km to the north-east of the Plan area.**

²⁰ The Flora (Protection) Order, 2015 (S.I. No. 356 of 2015) gives legal protection to 65 species of bryophytes in the Republic of Ireland (25 liverworts and 40 mosses). **There are six locations within the Plan area with a number of species protected by the Orders: Killiney (*Scleropodium touretii*); Ballycorus (*Ditrichum plumbicola*); Kelly's Glen (*Brachydontium trichodes* and *Campylostelium Saxicola*); and Killakee (*Bryum uliginosum* and *Bryum intermedium*).**

²¹ The project aims to manage roadside verges and green spaces in a way that allows us to maintain safe and accessible roadsides but also support pollinators, and to alter mowing regimes and reduce pesticide use. These areas can be used to create and enhance the ecological networks and wildlife corridors across the County by increasing connectivity and biodiversity. **There are currently approx. 100 of these sites designated across the County (shown on Figure 4.6).**

²² TPOs, certain trees, groups of trees and woodlands (shown on Figure 4.6) have been identified in the County Development Plan. Robust and appropriate levels of protection are provided for trees and tree groups identified, with a long-term aim of linking groups together to provide more robust tree assemblages.

²³ For more details refer to Section 4.6.6.

²⁴ For more detail refer to Section 4.6.1.

²⁵ 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 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.

²⁶ 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.

²⁷ Sensitive features include: tidal mudflats and sandflats; annual vegetation of drift lines; salicornia and other annuals colonising mud and sand; and embryonic shifting dunes.

²⁸ Sensitive features include: petrifying springs and alkaline fens.

²⁹ Sensitive features include: petrifying springs; old oak woodlands; and alluvial forests.

³⁰ Sensitive features include: oligotrophic waters containing very few minerals; dystrophic lakes; wet heath; dry heath; alpine and subalpine heaths; calaminarian grassland; species-rich nardus grassland; blanket bogs; siliceous scree; calcareous rocky slopes; siliceous rocky slopes; old oak woodlands; and otter.

³¹ Sensitive features include: reefs and harbour porpoise.

³² Sensitive features include: light-bellied brent goose; oystercatcher; ringed plover; grey plover; knot; sanderling; dunlin; bar-tailed godwit; redshank; black-headed gull; roseate tern; common tern; Arctic tern; and wetland and waterbirds.

³³ Sensitive features include: roseate tern; common tern; and Arctic tern.

³⁴ Sensitive features include: merlin; and peregrine.

European sites designated within 15 km buffer, but beyond County's boundary (ten SACs and six SPAs), include:

- Malahide Estuary SAC³⁵ (000205);
- Howth Head SAC³⁶ (000202);
- Glen of the Downs SAC³⁷ (000719);
- Baldoyle Bay SAC³⁸ (000199);
- North Dublin Bay SAC³⁹ (000206);
- Bray Head SAC⁴⁰ (000714);
- Carriggower Bog SAC⁴¹ (000716);
- Glenasmole Valley SAC⁴² (001209);
- Ireland's Eye SAC⁴³ (002193);
- The Murrough Wetlands SAC⁴⁴ (002249);
- Ireland's Eye SPA⁴⁵ (004117);
- The Murrough SPA⁴⁶ (004186);
- North Bull Island SPA⁴⁷ (004006);
- Baldoyle Bay SPA⁴⁸ (004016);
- Poulaphouca Reservoir SPA⁴⁹ (004063); and
- Howth Head Coast SPA⁵⁰ (004113).

For more detail on European sites please refer to the AA Natura Impact Report that accompanies the Proposed Material Alterations and this SEA Environmental Report.

4.6.4 Proposed Natural Heritage Areas

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

There are seven pNHAs designated within, partially within or adjacent to the County. These sites (mapped on Figure 4.2) include:

- South Dublin Bay (000210);
- Booterstown Marsh (001205);
- Dalkey Coastal Zone and Killiney Hill (001206);
- Fitzsimons Wood (001753);
- Loughlinstown Woods (001211);
- Dingle Glen (001207); and
- Ballybetagh Bog (001202).

4.6.5 Habitat Mapping⁵¹

The findings of a 'Habitat Mapping Survey' undertaken for parts of the Council's administrative area were prepared in 2007. This Heritage Council classification scheme used by the survey covers natural, semi-natural and artificial habitats of terrestrial, freshwater and marine environments and of rural and urban areas. Habitat categories are arranged within a series of ordered groupings to produce a hierarchical framework that operates on three levels. The scheme identifies 11 broad habitat groups (Level 1), 30 habitat subgroups (Level 2), and 117 separate habitats (Level 3). Level 2 habitat mapping is shown on Figure 4.4.

Three Areas of High Ecological Value which include a number of high diversity habitats were identified in the Habitat Mapping Survey:

- **Upland Region to the South East of the County** - this area has a wide variety of habitat types including upland blanket bog, wet heath, dry siliceous heath, conifer plantation, dense bracken, and pockets of dry humid acid grassland;
- **Woodland Area to the South East of the County** - this area includes Ballyman Glen SAC which contains a variety of habitats including habitats listed on Annex I of the Habitats Directive such as alkaline fen and petrifying springs; and
- **Kiltiernan / Loughlinstown Area** - to the east of Kiltiernan, surrounded by an area dominated by agricultural grassland with a large pocket of dry meadows and grassy verges, particularly rich in species diversity; other types of habitats

³⁵ Sensitive features include: tidal mudflats and sandflats; salicornia mud; Atlantic salt meadows; Mediterranean salt meadows; marram dunes; and fixed dunes.

³⁶ Sensitive features include: vegetated sea cliffs; and dry heath.

³⁷ Sensitive features include old oak woodlands.

³⁸ Sensitive features include: tidal mudflats and sandflats; salicornia mud; Atlantic salt meadows; and Mediterranean salt meadow.

³⁹ Sensitive features include: tidal mudflats and sandflats; annual vegetation of drift lines; salicornia mud; Atlantic salt meadows; Mediterranean salt meadows; embryonic shifting dunes; marram dunes; fixed dunes; humid dune slacks; and petalwort.

⁴⁰ Sensitive features include: vegetated sea cliffs; and dry heath.

⁴¹ Sensitive features include transition mires.

⁴² Sensitive features include: orchid-rich calcareous grassland; molinia meadows; and petrifying springs.

⁴³ Sensitive features include: perennial vegetation of stony banks; and vegetated sea cliffs.

⁴⁴ Sensitive features include: annual vegetation of drift lines; perennial vegetation of stony banks; Atlantic salt meadows; Mediterranean salt meadows; cladium fens; alkaline fens.

⁴⁵ Sensitive features include: cormorant; herring gull; kittiwake; guillemot; and razorbill.

⁴⁶ Sensitive features include: red-throated diver; greylag goose; light-bellied brent goose; wigeon; teal; black-headed gull; herring gull; little tern; and wetland and waterbirds.

⁴⁷ Sensitive features include: light-bellied brent goose; shelduck; teal; pintail; shoveler; oystercatcher; golden plover; grey plover; knot; sanderling; dunlin; black-tailed godwit; bar-tailed godwit; curlew; redshank; turnstone; black-headed gull; and wetland and waterbirds.

⁴⁸ Sensitive features include: light-bellied brent goose; shelduck; ringed plover; golden plover; grey plover; bar-tailed godwit; wetland and waterbirds.

⁴⁹ Sensitive features include: greylag goose and lesser black-backed gull.

⁵⁰ Sensitive features include kittiwake.

⁵¹ Dún Laoghaire-Rathdown County Council (2007) *Habitat Mapping Survey*

include wet grassland, mixed broadleaved woodland, wet pendulate oak-ash-hazel woodland and riparian woodland.

4.6.6 Land Cover Mapping

CORINE⁵² land cover mapping for the County is shown on Figure 4.3. The most dominant land cover types are urban fabric in the north and north-east of the County and pastures in the south and south-west. Locations of burnt areas⁵³ are identified in the area of Dublin Mountains, north-west of Glencullen.

Categories from CORINE mapping that may indicate areas with the potential for Annex I habitats (see Figure 4.3), include:

- Peat bogs;
- Mixed forests;
- Coniferous forest;
- Broad-leaved forest;
- Intertidal flats;
- Non irrigated land;
- Pastures;
- Complex cultivated patterns;
- Moors and heaths;
- Transitional woodland and scrub; and
- Land principally occupied by agriculture with areas of natural vegetation.

4.6.7 Register of Protected Areas

In response to the requirements of the Water Framework Directive 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). These designations include:

- WFD Salmonid Regulations (S.I. 293 only) including Surface Waters in Salmonid Waters⁵⁴ and Groundwater in Salmonid Waters⁵⁵; and
- WFD Surface Waters in Shellfish Areas⁵⁶ (shown on Figure 4.5).

RPAs relating to Nutrient Sensitive Waters, Bathing Waters and water bodies used for

Drinking Water are addressed under Section 4.9 "Water".

There are also a number of water dependent habitats in the County which have been listed on RPAs – these relate to designated SACs and SPAs (see Section 4.6.3).

4.6.8 Salmonid Waters

The Salmonid Regulations (S.I. 293/1988) designate the waters capable of supporting salmon (*Salmo salar*), trout (*Salmo trutta*), char (*Salvelinus*) and whitefish (*Coregonus*) as protected. 34 (no.) rivers, tributaries and lakes are listed and protected under these Regulations that prescribe quality standards for salmonid waters, the sampling programmes and the methods of analysis and inspection to be used by local authorities to determine compliance with the standards. The main channel of the River Dargle in County Wicklow is listed under the Regulations. Although the River Dargle does not flow through the Plan area, a tributary of the Dargle, County Brook, does flow through the south of the County.

The Dodder, which rises to the south-east of the Plan area and flows along the north-east boundary, and several of its tributaries are exceptional in the area in supporting Atlantic salmon and sea trout in addition to resident brown trout populations, eels and other fish species.

The Glencullen River which flows through the south of the Plan area is a tributary of the River Dargle and along with its tributaries, constitutes a salmonid system. The Carrickmines (Glenamuck)/Shanganagh system is a regionally important salmonid system. The Carrickmines system supports a resident population of brown trout and a migratory population of sea trout. The lower reaches of the Deansgrange Stream support a small but significant population of brown trout.

⁵² The CORINE (Coordinated 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. CORINE has become a key data source for informing environmental and planning policy on a national and European level. The main land cover type in Ireland is agricultural land including forestry, which accounts for two-thirds of the national landmass. Most of this is permanent grassland pastures. Peatlands and wetlands are the second most widespread land cover type, covering almost one-fifth of the country. While forested areas cover about one-tenth of the country. Despite rapid development in the past two decades, Ireland's landscape is predominantly rural and agricultural.

⁵³ Areas affected by recent fires - these areas include fires in forests and semi-natural areas.

<https://www.eea.europa.eu/publications/COR0-landcover>

⁵⁴ WFD Surface Water Bodies intersecting with WFD Designated Salmonid Waters under S.I. No. 293/1988 - European Communities (Quality of Salmonid Waters) Regulations 1988.

⁵⁵ WFD Ground Water Bodies intersecting with WFD Designated Salmonid Waters under S.I. No. 293/1988 - European Communities (Quality of Salmonid Waters) Regulations 1988.

⁵⁶ WFD Surface Water Bodies intersecting with Designated Shellfish Zones under S.I. No. 55/2009 European Communities (Quality of Shellfish Waters) (Amendment) Regulations 2009.

4.6.9 UNESCO Biosphere Designation⁵⁷

The Dublin Bay United Nations Educational, Scientific and Cultural Organization (UNESCO) Biosphere Reserve in North Bull Island was designated as a Biosphere Reserve in 1981 because of its rare and internationally important habitats and wildlife and the designation was extended to the wider Dublin Bay in 2015, reflecting the Bay's significant environmental, economic, cultural and tourism importance, and extends to over 300 km². Over 300,000 people live within the Biosphere.

The Dún Laoghaire-Rathdown area is within three different management zones of the Biosphere:

- The outer Transition Zone of the Biosphere (this zone comprises 173 km² and forms the outer part of the Biosphere, including residential areas, harbours, ports and industrial and commercial areas);
- The Core Zone of the Biosphere (this zone comprises 50 km² of areas of high natural value with key areas including the Tolka and Baldoyle Estuaries, Booterstown Marsh, Howth Head, North Bull Island, Dalkey Island and Ireland's Eye); and
- The Buffer Zone of the Biosphere (this zone comprises 82 km² of public and private green spaces such as parks, greenbelts and golf courses).

4.6.10 Other Designations

Other designations mapped on Figure 4.2 include the National Park, Nature Reserve and Ramsar site.

National Parks are specially designated protected areas of unspoilt beauty and there are six located in Ireland. The primary purpose of the National Parks is the conservation of biodiversity and landscape; however, they also provide for recreational space for locals and visitors. The Wicklow National Park is partially located within the south-west of the County.

A Nature Reserve is an area of importance to wildlife, which is protected under Ministerial order. There are currently 78 Statutory Nature Reserves. Most are owned by the State but some are owned by organisations or private

landowners. There is one Nature Reserve adjacent to the south-west of the Plan area, at Knocksink Wood.

The Convention of Wetlands of International Importance, especially as Water Fowl Habitat, was established at Ramsar in 1971 and ratified by Ireland in 1984. The main aim of the Convention is to secure the designation by each contracting state of wetlands in its territory for inclusion in a list of wetlands of international importance for waterfowl. This entails the commitment of each contracting state to a policy of protection and management of the designated wetlands, and of formulating and implementing planning so as to promote the conservation of designated wetlands and, as far as possible, the wise use of wetlands in its territory. Ireland presently has 45 sites designated as Wetlands of International Importance (Ramsar Wetlands), with surface areas of 66,994 hectares. There is one Ramsar site designated near the Plan boundary, Sandymount Strand/Tolka Estuary⁵⁸.

4.6.11 Other Sites of Ecological Importance

Within and surrounding the County, the ecological networks are made up of components including rivers, streams and their tributaries and banks, the various woodlands, parks, gardens and hedgerows within and surrounding the Plan area and lands used for agriculture. These components provide habitats for flora and fauna and facilitate linkages to the surrounding countryside for flora and fauna.

Public parks and open spaces within the Plan area are important for biodiversity in urban settings. These spaces provide a habitat for birds, insects and small mammals. Parks also support numerous plants, hedgerows and woodlands acting as a wildlife corridor connecting habitats in the area. Parks and green spaces within the Plan area include Marlay Park in Rathfarnham, Deerpark in Mount Merrion, Cabinteely Park and Shanganagh Park.

A hedgerow survey of the west, south and central parts of the Plan area has been undertaken as part of the Habitat Mapping Survey⁵⁹. The hedgerow survey identifies the

⁵⁷ Further information and mapping available at <https://www.catchments.ie/dublin-bay-unesco-biosphere/>.

⁵⁸ There is only a point location available for the Ramsar designation, however they are likely to be similar to those of Sandymount Strand/Tolka Estuary SPA.

⁵⁹ Dún Laoghaire-Rathdown County Council (2007) *Habitat Mapping Survey*

most important hedgerows in the County in terms of their biodiversity (shown on Figure 4.6).

An otter survey⁶⁰ was undertaken for 11 rivers and streams as well as some smaller tributaries within Dún Laoghaire-Rathdown area, including: Elm Park; Trimblestown; Priory Stream; Carysfort; Monkstown Stream; Deansgrange; Cabinteely; Racecourse; Loughlinstown-North; Loughlinstown South; and Crinken. Otter locations in Dún Laoghaire-Rathdown are shown on Figure 4.6.

A petrifying springs study⁶¹ has identified 19 springs within the Dún Laoghaire-Rathdown area, out of which most of them with recorded locations of the Annex I priority habitat 'Petrifying springs with tufa formation' (protected under the EU Habitats Directive (Directive 92/43/EEC)).

4.6.12 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.

The Plan includes measures to contribute towards the protection of biodiversity and flora and fauna and associated ecosystem services.

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.

⁶⁰ Dún Laoghaire-Rathdown County Council (2019) *Otter survey of selected rivers in Dún Laoghaire-Rathdown County Council district with management recommendations.*

⁶¹ Dún Laoghaire-Rathdown County Council (2019) *Petrifying Springs Study*

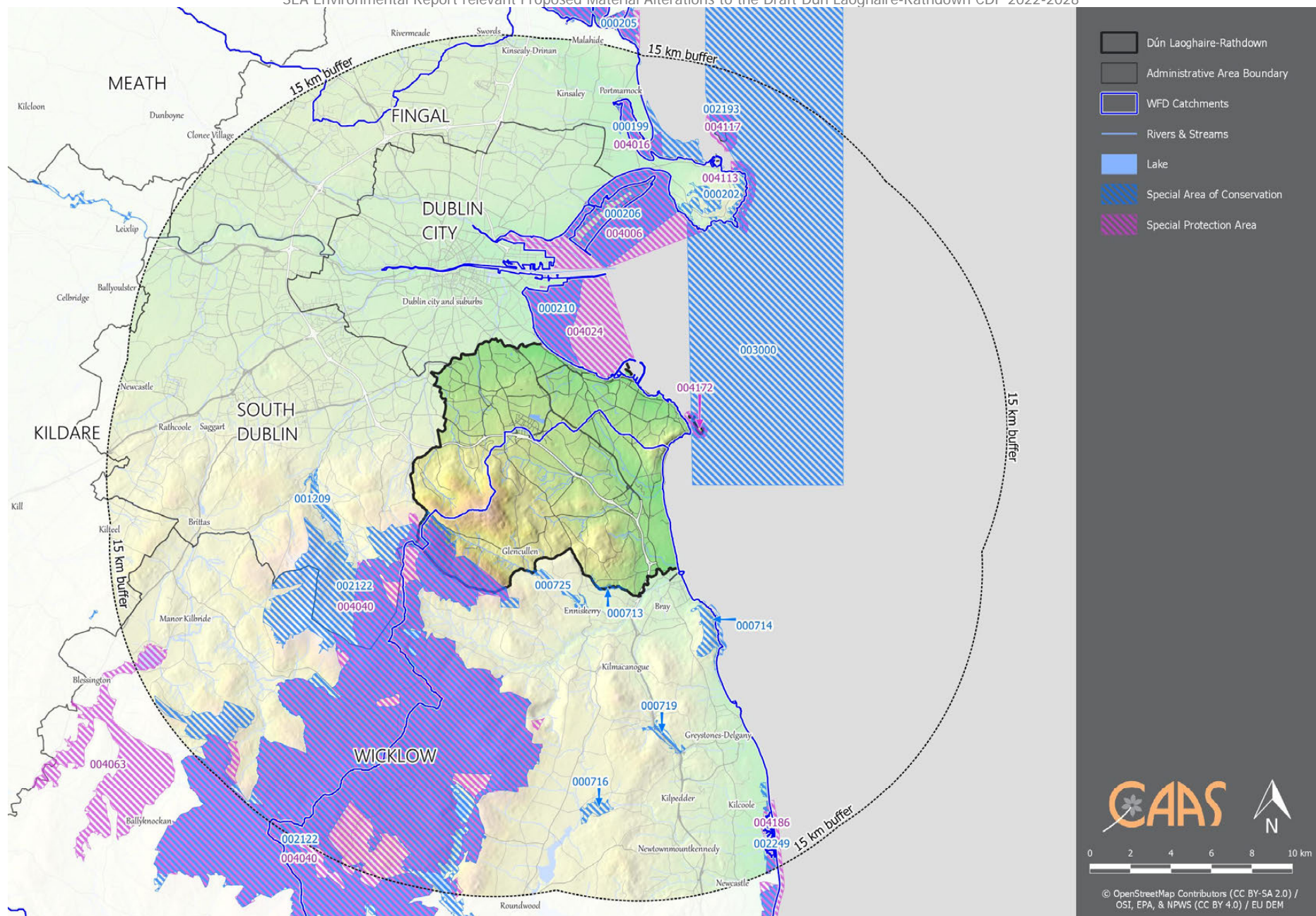


Figure 4.1 European Sites within and within 15 km of the County

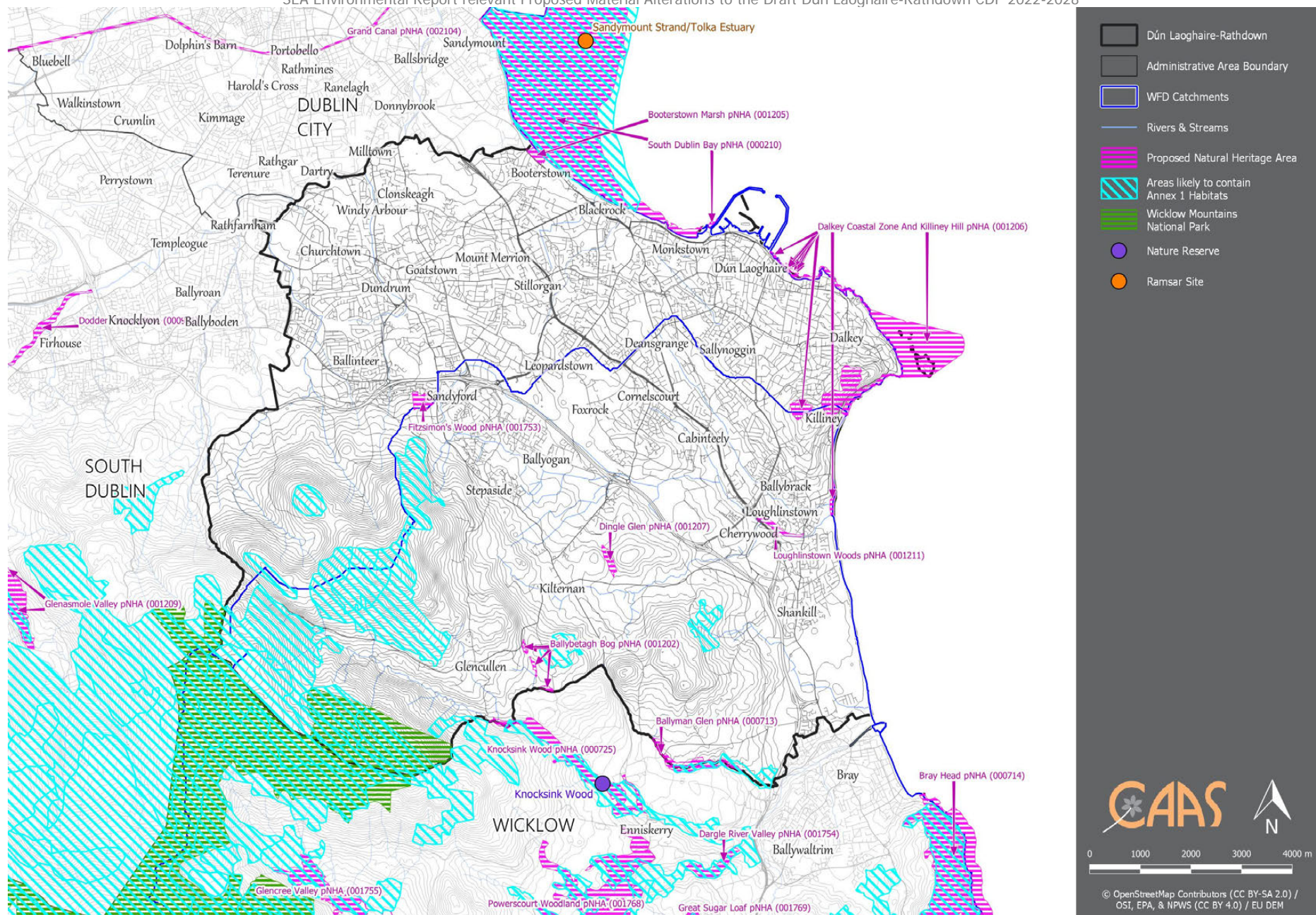


Figure 4.2 Proposed Natural Heritage Areas and Other Designations

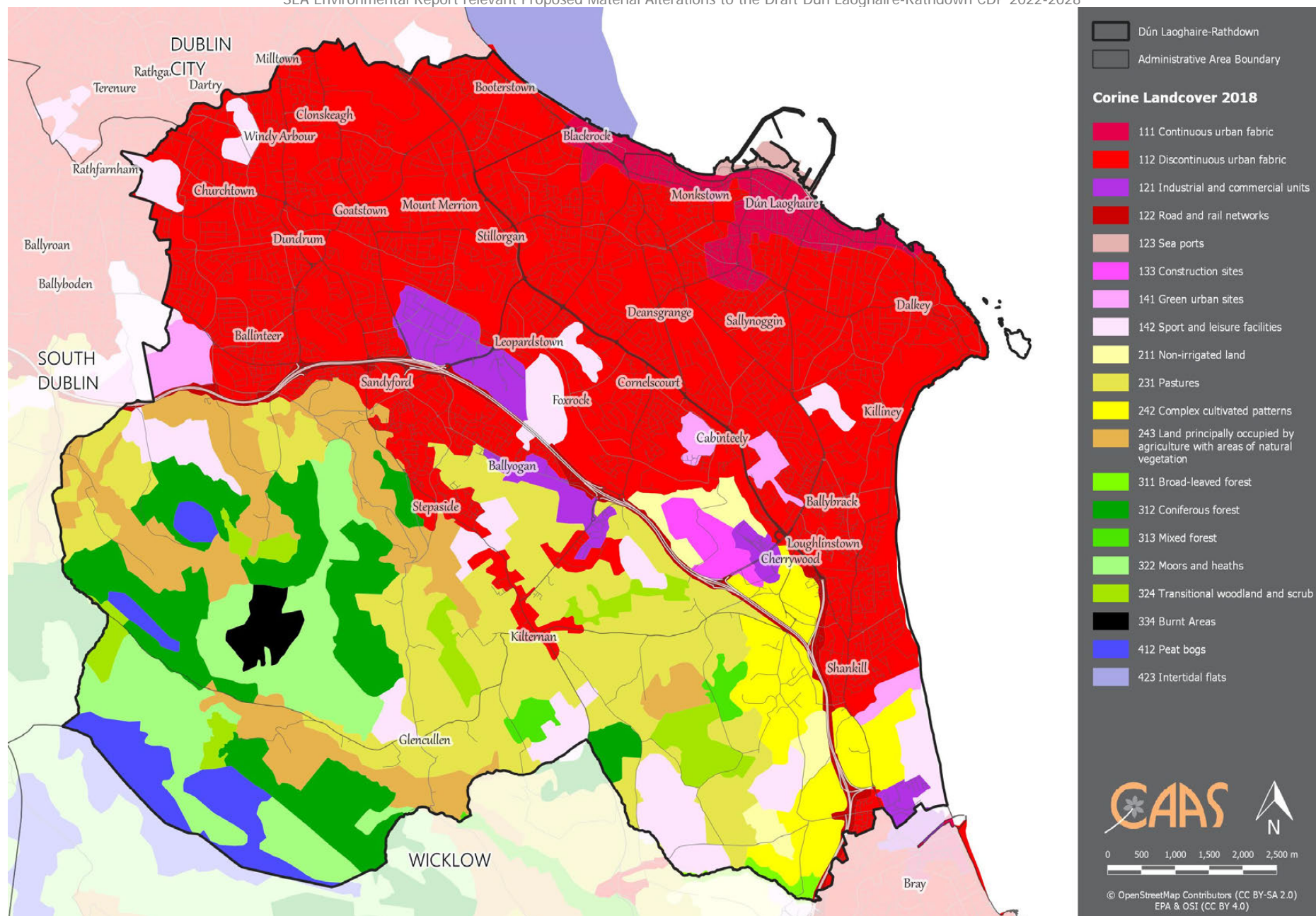


Figure 4.3 CORINE Land Cover 2018

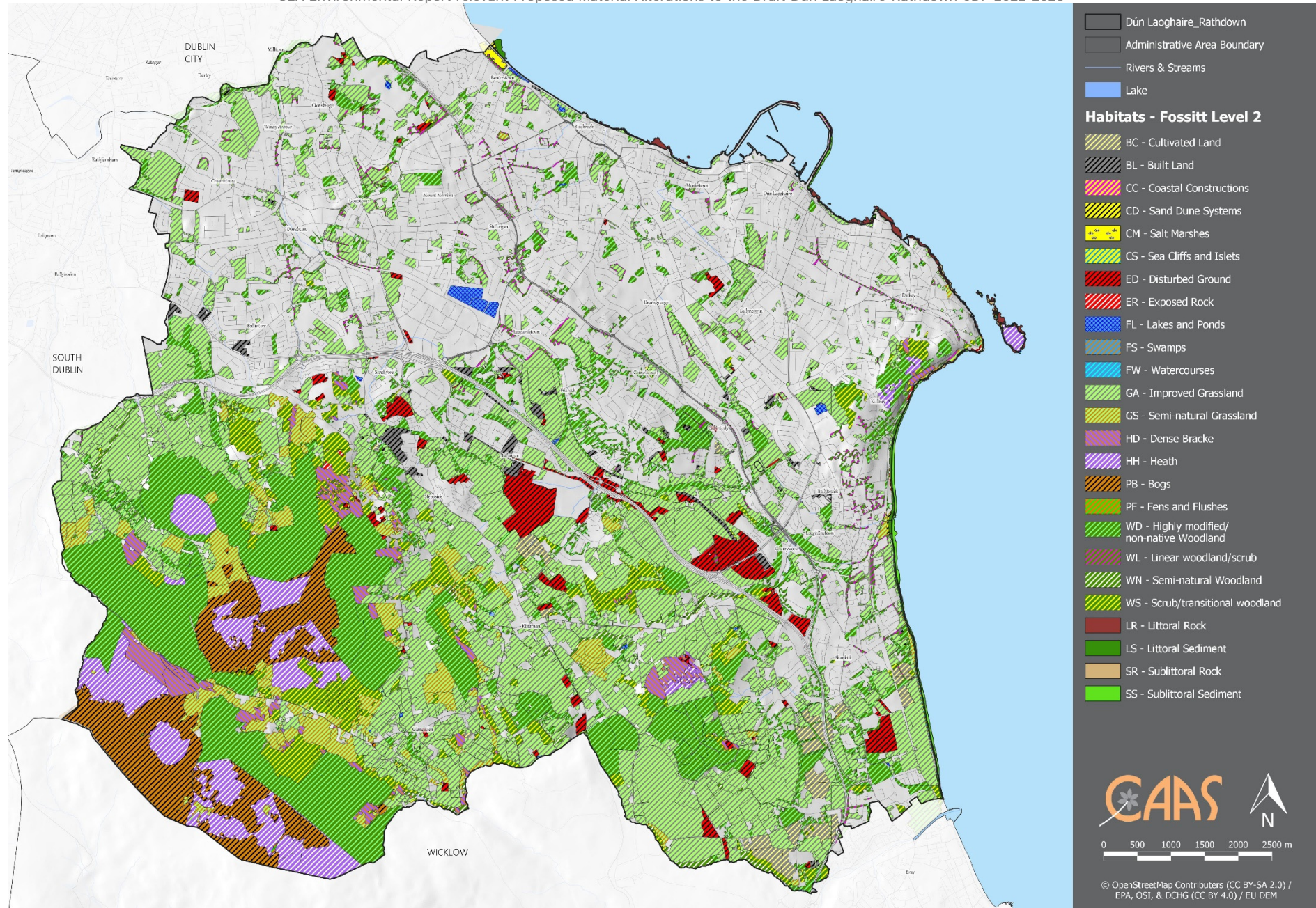


Figure 4.4 Habitat Mapping: Level 2 (Dún Laoghaire-Rathdown County Council, 2007)

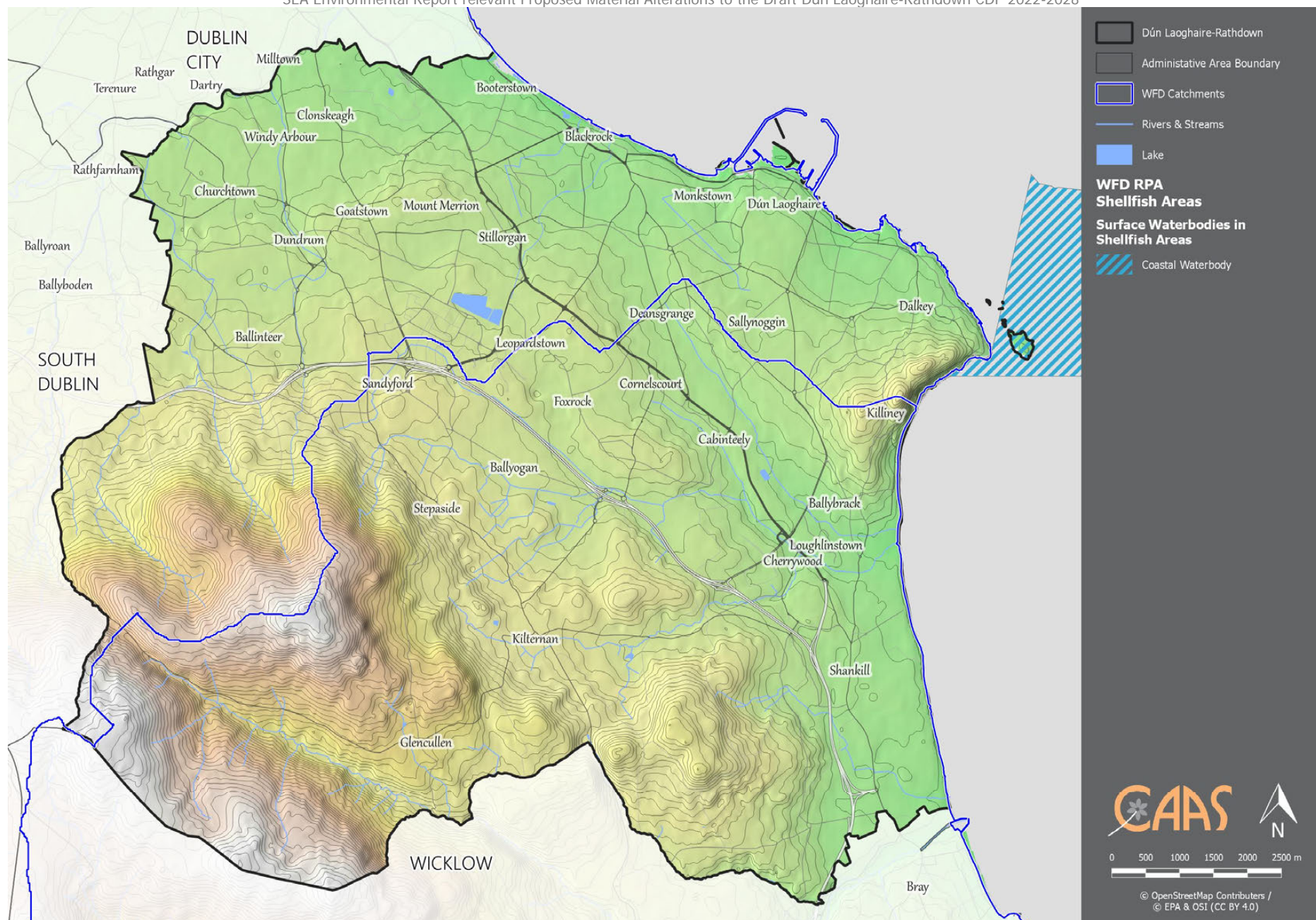


Figure 4.5 WFD Register of Protected Areas: Shellfish Areas

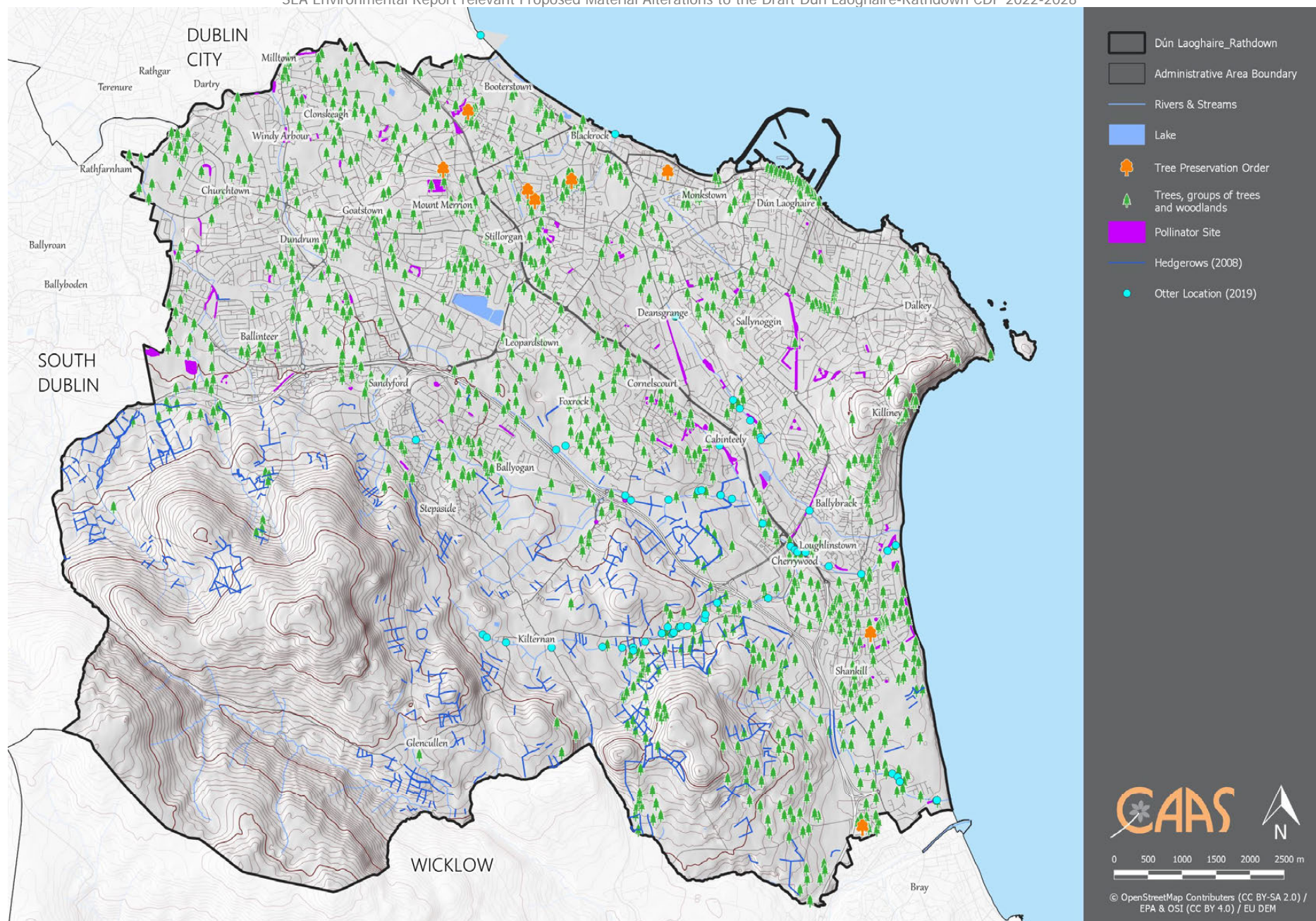


Figure 4.6 Other Sites of Ecological Importance

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4.7 Population and Human Health

4.7.1 Population⁶²

In the 2016 Census the total population of County Dún Laoghaire-Rathdown was identified as being of 218,018 persons, an increase in total population in the County by c. 11% (c. 24,000 persons) over a 10-year period from 2006.

Dún Laoghaire – Rathdown is identified by the Eastern and Midland Regional Assembly Regional Spatial and Economic Strategy (RSES) 2019-2031 as being part of the Dublin Metropolitan Area. There are seven local authorities in this area including all of Dublin City, South Dublin and Dún Laoghaire-Rathdown and parts of Fingal, Meath, Kildare and Wicklow.

The RSES sets out a settlement hierarchy for the Region and identifies key growth areas that will see significant development up to 2031 and beyond. The vast majority of the built-up footprint of Dún Laoghaire-Rathdown is located within the area defined as Dublin City and Suburbs, which comprises the first tier in the regional settlement hierarchy. Old Connaught, in the south of the County, comprises a component part of the key town of Bray, while Glencullen comprises a rural village.

The total population of Dublin City and suburbs was 1.2 million persons in 2016, while the population of the Metropolitan Area of Dublin was 1.4 million persons. Under NPO 68 of the National Planning Framework, the RSES makes a further allowance for up to 20% of the targeted growth in Dublin City and Suburbs area to be transferred to other settlements in the Dublin Metropolitan Area Strategic Plan (MASP), which includes the Metropolitan Key Town of Bray.

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

- Increase in demand for wastewater treatment at the municipal level;
- Recreational and development pressure on habitats and landscapes;

- Increase in demand for water supply and associated potential impact of water abstraction from the rivers;
- Potential interactions in flood-sensitive areas; and
- Potential effects on water quality.

4.7.2 Human Health

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.

4.7.3 Existing Problems

There is historic and predictive evidence of flooding in various locations across the County (see information on Strategic Flood Risk Assessment at Section 4.9.9).

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 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. The number of homes within the County with radon levels above the reference level is within the normal range experienced in other locations across the country⁶³.

Information on the status of groundwaters and surface waters is provided under Section 4.9 while compliance issues in relation to water services are detailed under Section 4.11.10.

⁶² Much of the text in this section is taken from the Draft Plan

⁶³ Mapping available at <http://www.epa.ie/radiation/radonmap>

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 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. Although a proposal for a Soil Framework Directive was withdrawn in 2014, the importance of sustainable soil management was recognised in the Seventh Environment Action Programme, where sustainable land management is to be achieved by 2020.

Urban soils⁶⁴ (mainly in the northern, most built-up parts of the Plan area) and lithosol soils⁶⁵ (mainly in the south and south-western parts of the Plan area) are the two most dominant soil types in the County (shown on Figure 4.7). Other soil types identified include:

- Alluvial soils⁶⁶ (in the flood plains of rivers and streams);
- Brown podzols⁶⁷ (mainly in the south of the Plan area);
- Luvisols⁶⁸ (in the coastal south-east); and
- Brown earths⁶⁹ (mainly in the east and south-east of the Plan area).

Peatlands are unique systems comprising of peat soil providing as significant carbon stores and supporting a range of unique species.

Active blanket bogs and active raised bogs are considered to be priority habitats, listed on Annex I of the EU Habitats Directive. Peat soils are often indicative of areas that are the most sensitive to development due to ecological sensitivities and impeded drainage issues. The ombrotrophic (rain-fed) peat soils in the south-west of the Plan area are also a subject to ecological designations (see Section 4.6).

Outcropping rock is identified in a number of upland and coastal locations.

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

- Bedrock mapping;
- Quaternary and Physiographic mapping; and
- National Aquifer and Recharge mapping.

4.8.1 Geological Sites

Geological Survey of Ireland coordinates the Irish Geological Heritage Programme, which seeks to identify and select sites of geological interest within each county across the country. The audit of County Geological Sites in Dún Laoghaire-Rathdown was completed in 2014 and identified 12 County Geological Sites⁷⁰. Concentrations of these designations can be found in the upland areas and along the coast, (mapped on Figure 4.8). County Geological Sites within the Plan area include:

- Ballybetagh Bog;
- Ballycorus;
- Blackrock Breccia;
- Carrickgollogan;
- Dalkey Hill;
- Dalkey Island;
- Killiney Bay;
- Killiney Hill;
- Murphystone Quarry;
- The Scalp;
- Three Rock Mountain; and
- White Rock, Killiney.

⁶⁴ 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.

⁶⁵ Lithosols are shallow non-calcareous soils, commonly overlying hard rock or skeletal and gravelly material. They tend to be stony soils, or with shattered bedrock and are associated with frequent rock outcrops. Their use-range is usually limited to rough grazing.

⁶⁶ These are associated with alluvial (clay, silt or sand) river deposits.

⁶⁷ Brown podzol soils are characterised by dark brown humus-mineral soil covered with a thin mat of partly decayed leaves.

⁶⁸ Luvisol soils are generally fertile, widely used for agriculture and associated with significant accumulation of clay.

⁶⁹ Brown earths are well drained mineral soils, associated with high levels of natural fertility.

⁷⁰ Geological Survey of Ireland (2014) *The Geological Heritage of Dún Laoghaire-Rathdown. An Audit of County Geological Sites in Dún Laoghaire-Rathdown.*

4.8.2 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.

Given the urban nature of the County and the range of land use activities which have taken place historically, soils have been contaminated in the past. Such contamination has the potential to affect water quality, biodiversity and flora and fauna and human health. Under the Plan (Chapter 12), where brownfield redevelopment is proposed, adequate and appropriate investigations are required to be carried out into the nature and extent of any soil and groundwater contamination and the risks associated with site development work.

The former Ballyogan Landfill (EPA Licence no. W0015-01) is located in Jamestown Park, in the central parts of the Plan area. The landfill was decommissioned in 2005 and remediation works at the site have been completed.

Ballyogan landfill is representative of many landfill sites in Ireland that have reached the aftercare phase. In addition to this, it is a landfill that has come under strong urban influence since its establishment with extensive residential and commercial development having taken place in its vicinity.⁷¹

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.

The Plan area has several locations with a history of landslide events⁷² (shown on Figure

4.9). Many of these events are associated with the upland peatland areas in the south-west of the County and along the coast.

The GSI have identified that most of the Plan area has relatively low levels of landslide susceptibility, with moderate and high susceptibility in the south-west of the County and in some coastal areas to the east (as shown on Figure 4.9).

4.8.4 Existing Problems

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

⁷¹ EPA (July 2017) *Beneficial Use of Old Landfills as a Parkland Amenity (including case study on the Ballyogan Landfill Conversion to Parkland Amenity)*.

⁷² Over 2,500 landslide events are recorded in the National Landslides Database available from GSI (www.gsi.ie). This dataset also includes Landslide Susceptibility Mapping to assist in the

identification of areas that are likely to experience landsliding. Recorded events in the County include: Ticknock (2001); Killiney (2000); Killiney Beach, (2005); and Ballybrew Glencullen (1947). Date records are not available for all landslide events mapped on Figure 4.9.

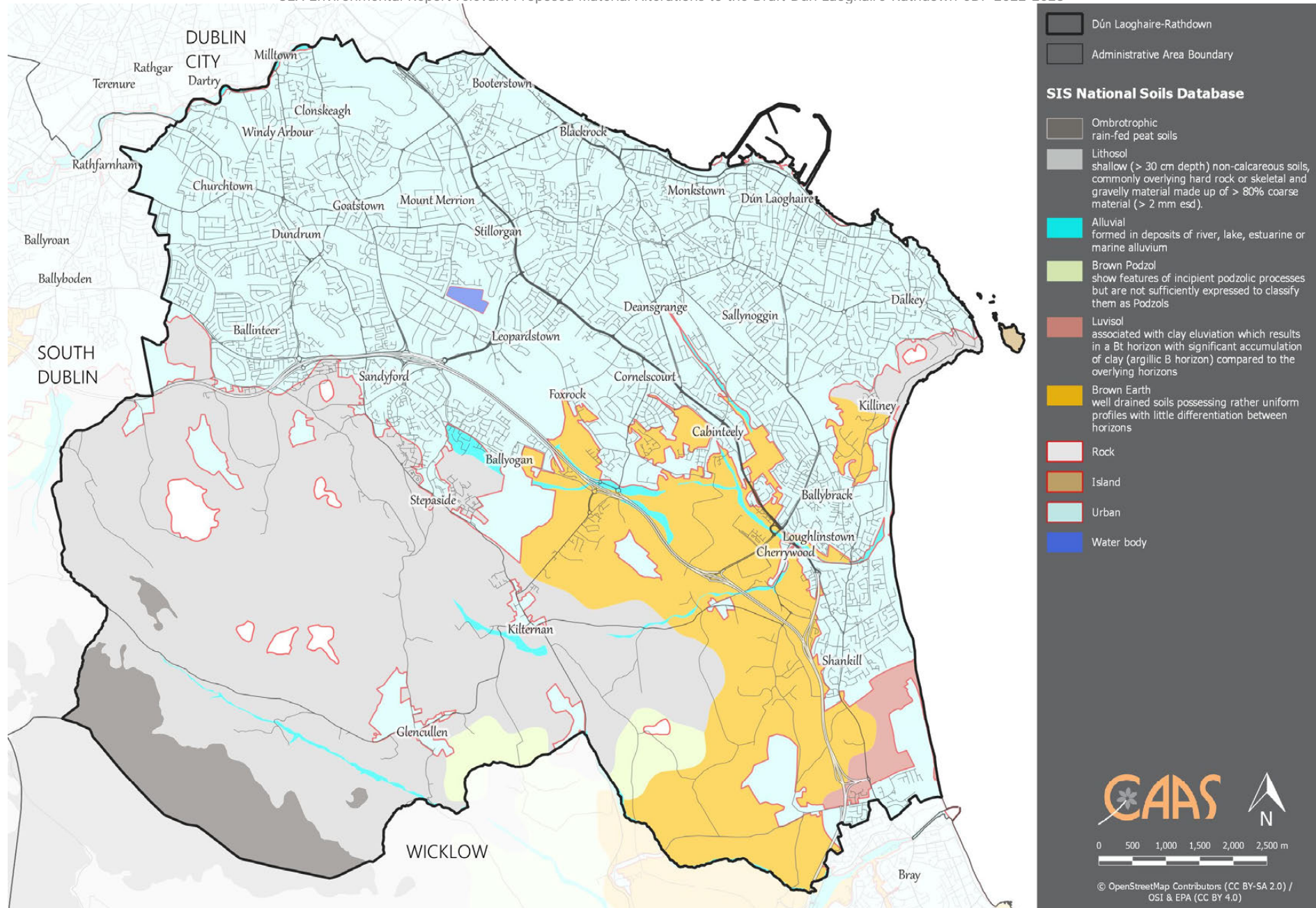
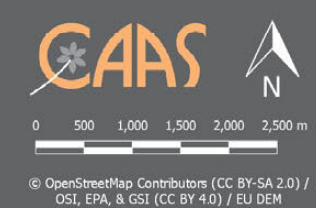


Figure 4.7 Soil Type

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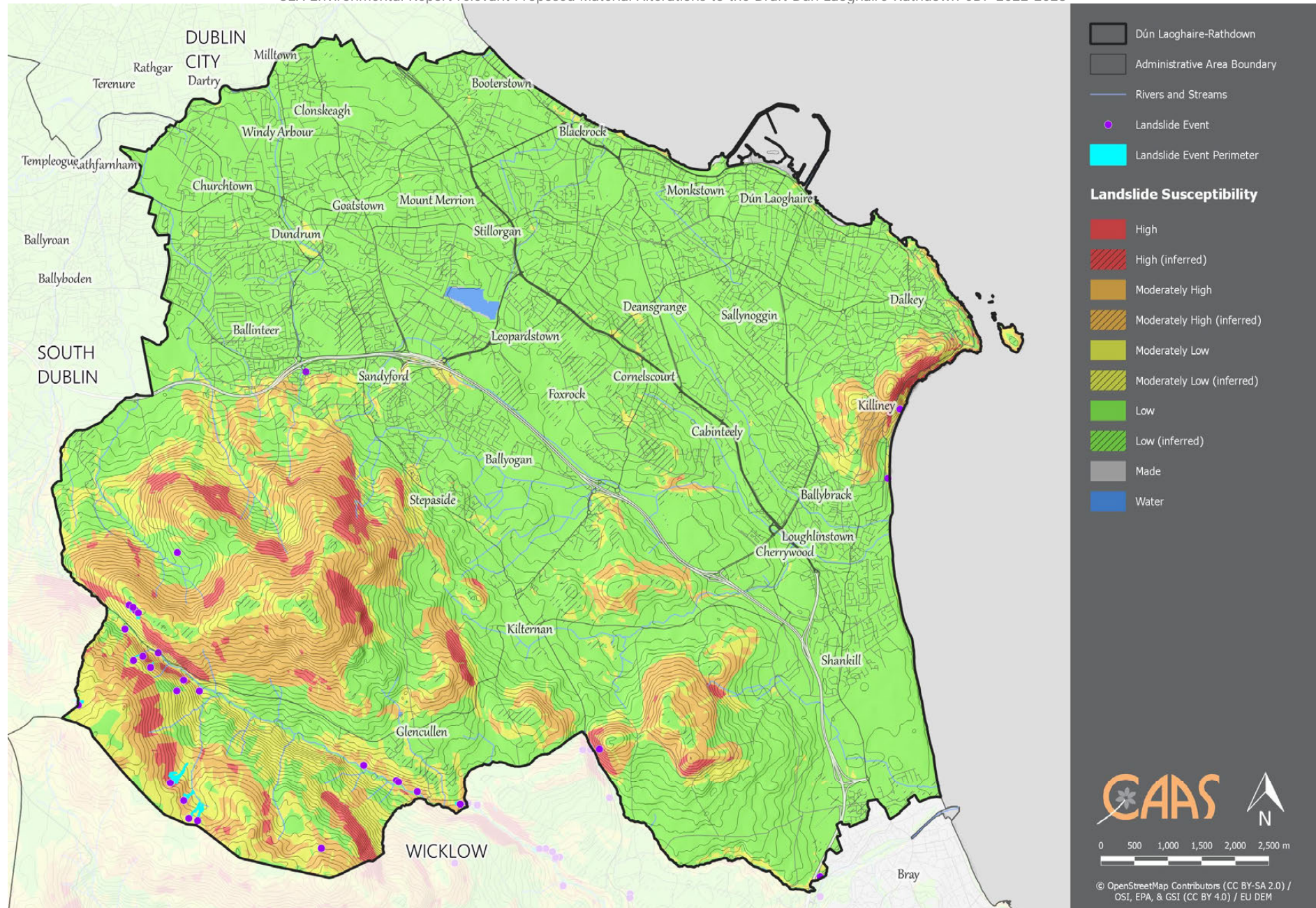


Figure 4.9 Landslide Susceptibility and Previous Landslide Events

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.

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 that 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 County boundary, with respect to impacts upon waters can be estimated to be all bodies of groundwater and all surface waters downstream areas of catchments which drain 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.

Most of the Plan area is located within the catchment of the Liffey and Dublin Bay (an area drained by the River Liffey and by all streams entering tidal water between Sea Mount and Sorrento Point). The Plan area is also partially drained by the Avoca-Vartry catchment (an area drained by the Rivers Avoca and Vartry and by all streams entering tidal water between Sorrento Point and Kilmichael Point). The main rivers within the Plan area are the Loughlinstown River, the Glencullen River, the Little Dargle River and the River Dodder.

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'.

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 WFD surface water status (2013-2018), for rivers and coastal waters within and surrounding the County is shown on Figure 4.10 and on Table 4.1.

The WFD status of most of the rivers and streams within the County is classified as

moderate, good and high, however a section⁷³ of the Kill of the Grange Stream is identified as *poor* due to unsatisfactory ecological/biological and/or physio-chemical status.

Coastal water bodies the Irish Sea and Dublin Bay, adjacent to the north-east of the County, are currently identified as being of *good* status while the Southwestern Irish Sea - Killiney Bay water body, adjacent to the coastline, is of *high* status.

Significant pressures, those pressures which need to be addressed in order to improve water quality, have been identified⁷⁴ for waterbodies that are 'At Risk' of not meeting their water quality objectives under the WFD. Significant pressures for surface water bodies within or adjacent to Dún Laoghaire-Rathdown are identified on Table 4.1. There are various types of pressures identified, such as:

- **Urban run-off pressures** - can 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.
- **Urban wastewater pressures** - can 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 impact on the ecology of surface waters.
- **Hydromorphological and anthropogenic pressures** are identified together in many instances. Hydromorphological pressures can 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 can include: water abstractions; invasive species; agriculture; use of fertilizers, manures and pesticides; animal husbandry activities; inefficient irrigation practices; deforestation of woods; aquaculture; pollution due to industrial effluents and domestic sewage; and recreational activities.

Table 4.1 WFD River and Coastal Waterbodies Status⁷⁵

Waterbody Name (EPA Identification Code) ⁷⁶	Waterbody Type	WFD Waterbody Status (2013 -2018) ⁷⁷
Kill of the Grange Stream_010	River	Poor - due to poor ecological/biological status. This waterbody is identified to be under pressure from hydromorphological /anthropogenic, urban run-off and urban wastewater sources
Carrickmines Stream_010	River	Moderate . This waterbody is identified to be under pressure from urban run-off sources .
Dargle_030	River	Moderate . This waterbody is identified to be under pressure from urban wastewater sources .
Dodder_050	River	Moderate . This waterbody is identified to be under pressure from hydromorphological, urban run-off and urban wastewater sources .
Shanganagh_010	River	Moderate . No pressures identified.
Dargle_040	River	Good . No pressures identified.
Owenadoher_010	River	Good . This waterbody is identified to be under pressure from urban run-off sources .
Dublin Bay	Coastal	Good . No pressures identified.
Irish Sea Dublin (HA 09)	Coastal	Good . No pressures identified.
Glencullen_010	River	High . No pressures identified.
Southwestern Irish Sea - Killiney Bay (HA10)	Coastal	High . No pressures identified.

⁷³ As per EPA classification system (gis.epa.ie/EPAMaps)

⁷⁴ EPA (2019): Report on Water Quality in Ireland 2013-2018

⁷⁵ Source: <https://gis.epa.ie/EPAMaps/> and <https://gis.epa.ie/EPAMaps/Water>.

⁷⁶ The number at the end of each river water body name indicates where the waterbody is located along the main river channel. For example, the waterbody at the source is coded '_010', the next

waterbody downstream is coded '_020' and the final waterbody before the river becomes transitional is '_180'.

⁷⁷ There is a data gap relating to WFD surface water status data. There are a small number of waterbodies within the Plan area with overall status currently not assigned to them (such as **Brewery Stream**) and the term "*unassigned status*" applies in respect of these waterbodies. These are not included on the Table 4.1.

4.9.5 Ground Water

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 (2013-2018) of groundwater underlying the County is mostly identified as being of *good* status, with an area of *poor* status in the east of the Plan area⁷⁸ (as shown on Figure 4.11).

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 vulnerability of aquifers underlying the County are mapped on Figure 4.12 and generally classified as being of:

- *High, moderate and low vulnerability*, in most of the County; or
- *Extreme vulnerability and extreme (rock at or near surface or karst)* mainly in upland and coastal areas.

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 4.13. Productivity is generally classified as being:

- *Poor aquifer bedrock which is generally moderately unproductive except for local zones* - in the most of the Plan area;
- *Locally important aquifer bedrock, which is moderately productive only in local zones* - mainly in the north and coastal areas in the south-east of the Plan area; and
- *Locally important gravel aquifer* - in the south-east of the Plan area.

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 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).

Entries to the RPAs within and adjacent to the Plan area include:

- WFD Surface Water in Nutrient Sensitive Areas⁷⁹ in the County including coastal and river waterbodies as shown on Figure 4.14;
- WFD Groundwater in Nutrient Sensitive Areas⁸⁰ in the County (shown on Figure 4.14);
- WFD Drinking Water Surface Water Bodies⁸¹ (shown on Figure 4.15). Groundwater beneath the entire County is also included;
- WFD Bathing Water Areas⁸² (shown on Figure 4.16).

⁷⁸ Underlying Industrial Facility (EPA Licence Number P0019-02).

⁷⁹ Areas designated as sensitive under the Urban Wastewater Treatment Directive (91/271/EEC) and and transposing Regulations.

⁸⁰ Groundwater bodies that intersect with areas designated as sensitive under the Urban Wastewater Treatment Directive (91/271/EEC) and and transposing Regulations.

⁸¹ Various water bodies are used for drinking water abstraction in accordance with European Communities (Drinking Water) (No. 2) Regulations 2007 (SI No. 278/2007).

⁸² Designated Bathing Waters exist under the Bathing Water Quality Regulations 2008 S.I. No. 79 of 2008, as amended. Seapoint Beach and Killiney Beach were identified under the Regulations in 1998 while White Rock Beach, Sandycove Beach and the 40ft were identified in 2018.

RPA's relating to Salmonid Regulations and Shellfish Areas are addressed under Section 4.6 "Biodiversity and Flora and Fauna".

There are also a number of water dependent habitats in the County which have been listed on RPA's – these relate to designated SACs and SPAs (see Section 4.6.3).

4.9.8 Bathing Waters

There are five locations identified as Bathing Waters under the Bathing Water Regulations 2008, as amended (see Figure 4.16): Seapoint Beach; Killiney Beach; Sandycove Beach; the 40ft Bathing Area; and White Rock Beach.

Seapoint Beach and Killiney Beach were identified under the Regulations in 1998 while White Rock Beach, Sandycove Beach and the 40ft were identified in 2018.

For bathing waters, Mandatory and Guide Values are set out for bathing waters in the 2006 EU Bathing Water Directive and transposing Regulations. Mandatory Values are values that must be observed if the bathing area is to be deemed compliant with the Directive. Compliance with Guide Values exceeds guidance with Mandatory Values and can be regarded as quality objectives which bathing sites should endeavour to achieve.

Bathing waters are now classified into four quality categories; 'excellent', 'good', 'sufficient', or 'poor' with a minimum target of 'sufficient' required to be achieved for all bathing waters.

The most recent available data from the EPA for 2019⁸³ shows that locations of designated bathing waters within the Plan area (as shown on Figure 4.10) are either classified as *excellent*⁸⁴ (at Sea Point; White Rock Beach; and Forty Foot) or *good*⁸⁵ (at Killiney and Sandycove Beach).

The bathing water quality at Merrion Strand, which adjoins the County boundary, is currently of *poor* status. One of the main issues identified at Merrion Strand is the impact from two

polluted streams which flow onto the beach. These are the Elm Park and Trimblestown Streams, which flow through both Dún Laoghaire-Rathdown and Dublin City Council areas. These streams are polluted by a combination of misconnections, run-off from roads, leaks, spills and overflows from wastewater collection systems.

A new task force was set up by Dublin City Council in 2019 to specifically focus on improving the bathing water quality at Merrion Strand and Sandymount Strand. Actions already underway include an increase in water quality sampling to help identify the sources of pollution. Dublin City Council is also working with Dún Laoghaire-Rathdown County Council and Irish Water to address pollution sources related to the wastewater network including misconnections, combined sewer overflows and pumping station overflows. A number of areas have been identified for further investigation, including significant misconnections. Dublin City Council is investigating the potential for creating wetlands to improve the water quality of the Elm Park Stream.⁸⁶

The Blue Flag award is given to beaches and marinas that have excellent water quality and maintain other standards including effective and appropriate management to ensure the protection of the natural environment and safety standards. The bathing location at Seapoint was awarded with the Blue Flag in 2020.

4.9.9 Flooding

Certain areas across the County are at risk from groundwater, pluvial⁸⁷, fluvial⁸⁸ estuarial⁸⁹ and coastal⁹⁰ flooding. Dún Laoghaire-Rathdown is located on the east coast of Ireland, and much of the Plan boundary is subject to flood risk from the Irish Sea. There is historic evidence of flooding in various locations across the Plan area, including along the Dodder River and its tributaries, Dundrum Slang, Little Dargle, Crinken Stream, Shanganagh River, Loughlinstown River, Deansgrange Stream, Carrickmines River, Carysfort/Maritime Stream and at various locations along the coastline.

⁸³ EPA Report (2020) on *Bathing Water Quality in Ireland for the year 2019*

⁸⁴ The highest, cleanest class

⁸⁵ The second highest, second cleanest class

⁸⁶ EPA Report (2020) *Bathing Water Quality in Ireland for the year 2019*

⁸⁷ Resulting from high intensity rainfall events where run-off volume exceeds capacity of surface water network.

⁸⁸ Watercourse capacity is exceeded or the channel is blocked and excess water spills from the channel onto adjacent floodplains.

⁸⁹ A combination of high tide and high river flows prevents water from flowing out to sea causing water levels inland to flood river banks.

⁹⁰ Resulting from higher sea levels than normal causing the sea to overflow onto land. Such flooding is influenced by high tide level, storm surges and wave action.

Historic and predictive flood mapping for the County is shown on Figure 4.17, which shows locations of historical flood events, and Figure 4.18, which shows predictive Flood Zones A and B⁹¹ for fluvial and coastal flood risk.

Locations within and adjacent to the County that were identified by the Office of Public Works (OPW) in 2012 as requiring detailed assessment of flood risk (Areas for Further Assessment) include Loughlinstown and Bray. Predictive flood risk mapping is now available from the OPW for these areas and other areas along the County's rivers and coastline.

A Strategic Flood Risk Assessment (SFRA), as required by 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (DEHLG and OPW, 2009), is being undertaken alongside the preparation of the SEA and the preparation of the Plan. This assessment considers available and emerging information on historical and predictive flood risk indicators.

4.9.10 Existing Problems

Subject to exemptions provided for by Article 4 of the WFD, based on available water data, certain surface and groundwater bodies will need improvement in order to comply with the objectives of the WFD.

The Draft Plan includes provisions that will contribute towards improvements in the status of waters.

There is an issue with bathing water quality at Merrion Strand, which adjoins the County boundary.

There is historic and predictive evidence of elevated levels of flood risk from fluvial and coastal sources at various locations across the County.

⁹¹ **Flood Zone A** – where the probability of flooding from rivers and the sea is highest (greater than 1% or 1 in 100 for river flooding or 0.5% or 1 in 200 for coastal flooding); **Flood Zone B** – where the probability of flooding from rivers and the sea is moderate (between 0.1% or 1 in 1000 and 1% or 1 in 100 for river flooding and between 0.1% or 1 in 1000 year and 0.5% or 1 in 200 for coastal flooding); and **Flood Zone C** – where the probability of flooding from rivers and the sea is low (less than 0.1% or 1 in 1000 for both river and coastal flooding). Flood Zone C covers all other areas that are not in zones A or B.

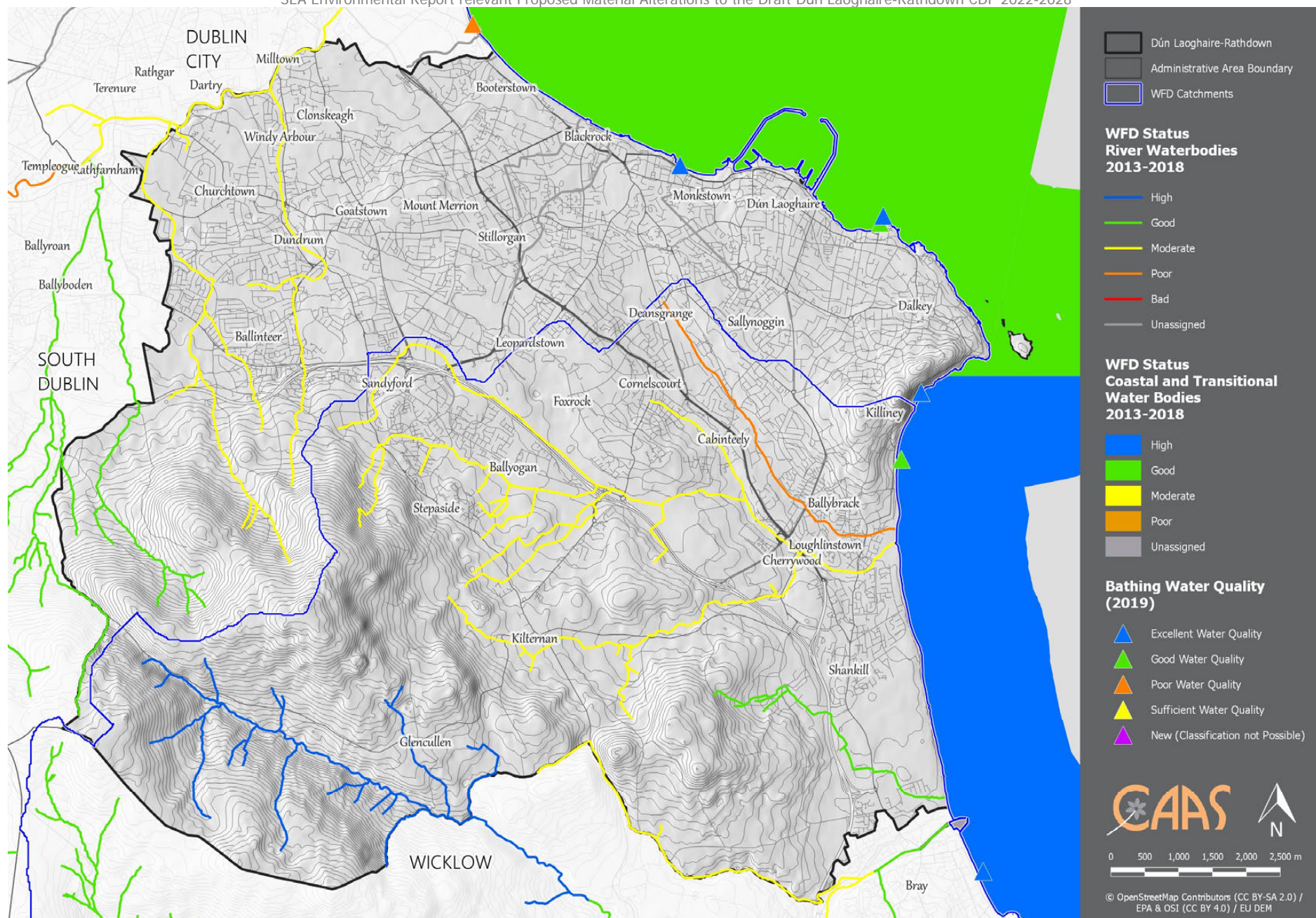


Figure 4.10 WFD Surface Water Status (2013-2018)

CAAS for Dún Laoghaire-Rathdown County Council

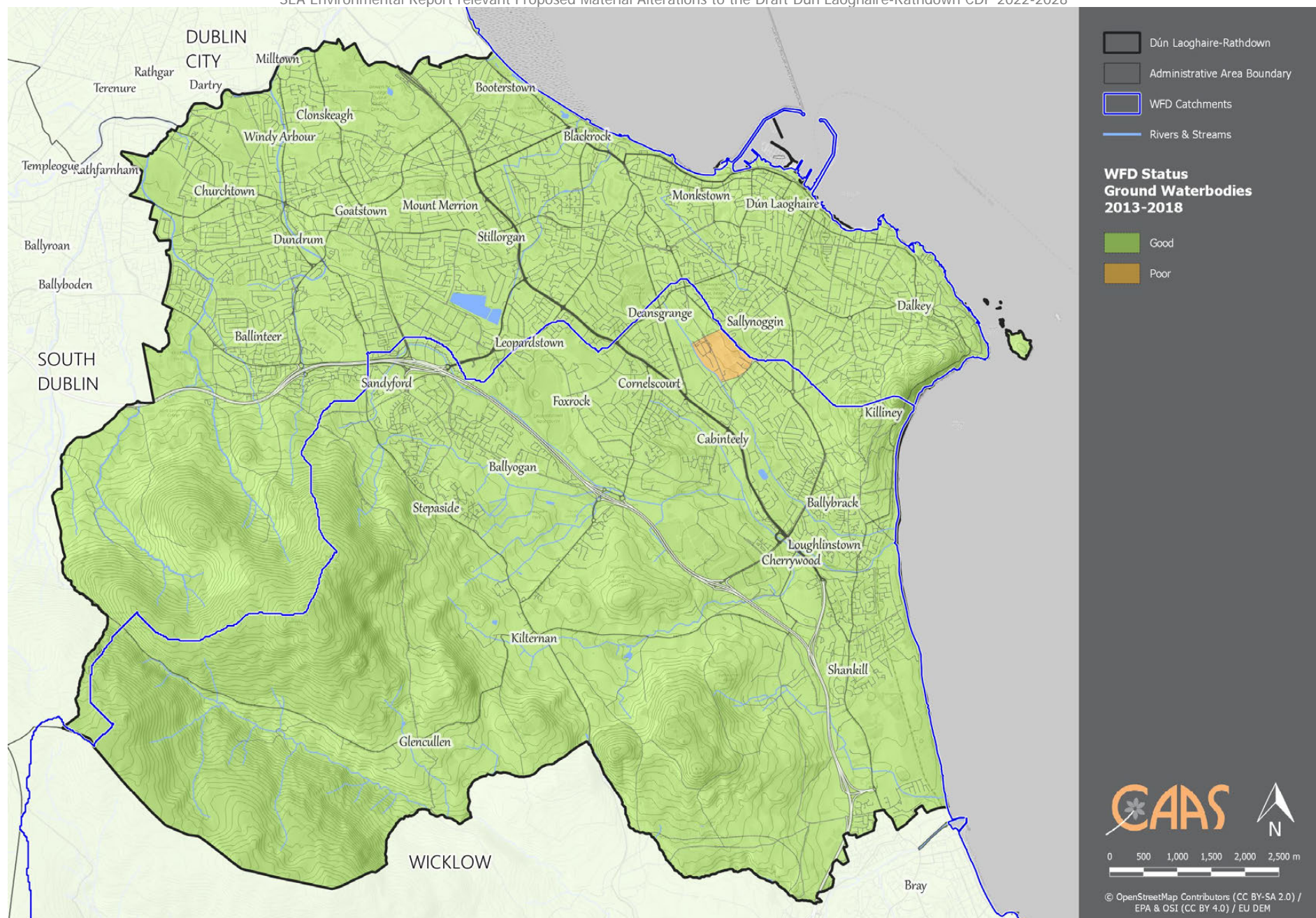


Figure 4.11 WFD Groundwater Status (2013-2018)

CAAS for Dún Laoghaire-Rathdown County Council

CAAS for Dún Laoghaire-Rathdown County Council

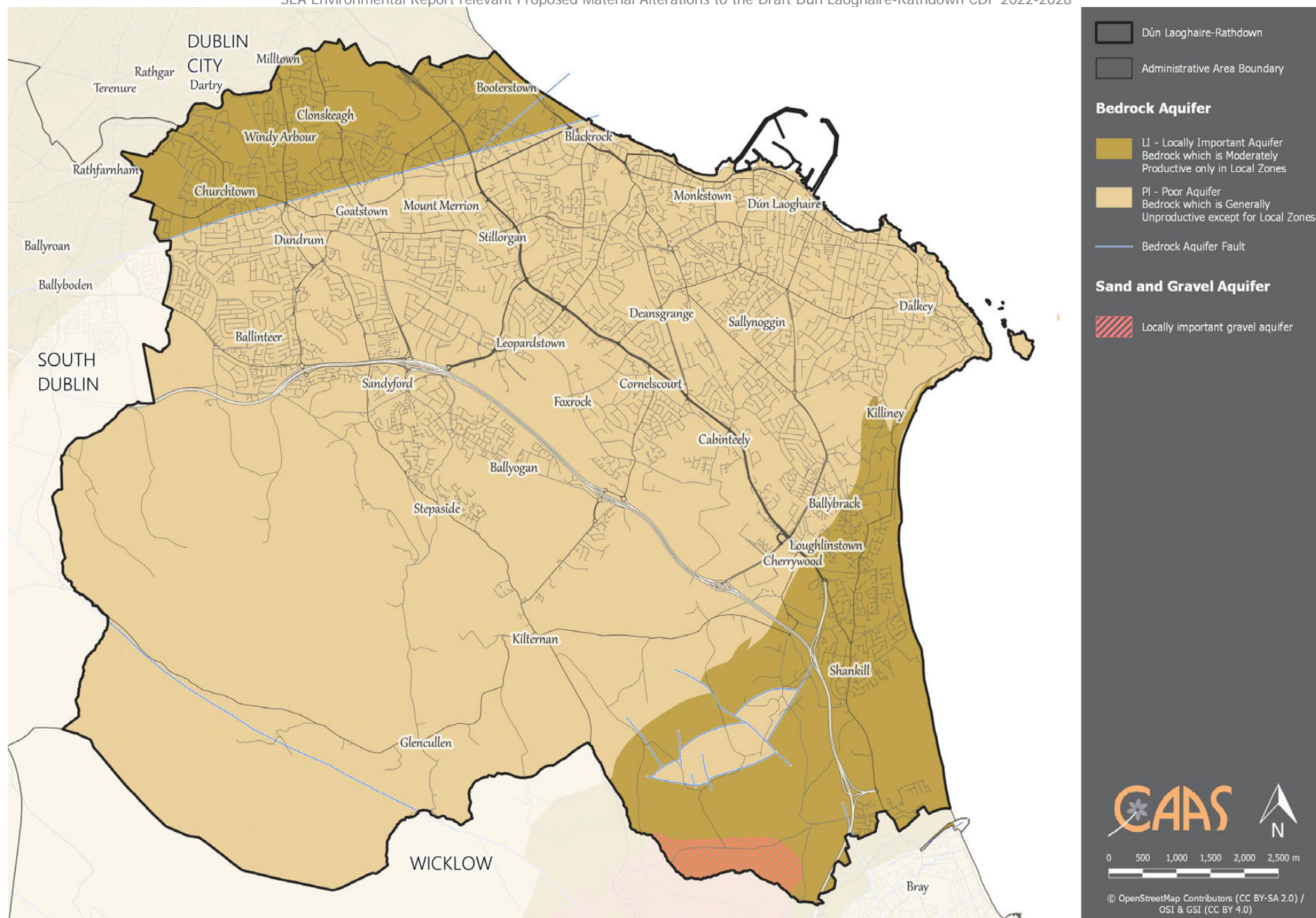


Figure 4.13 Groundwater Productivity

CAAS for Dún Laoghaire-Rathdown County Council

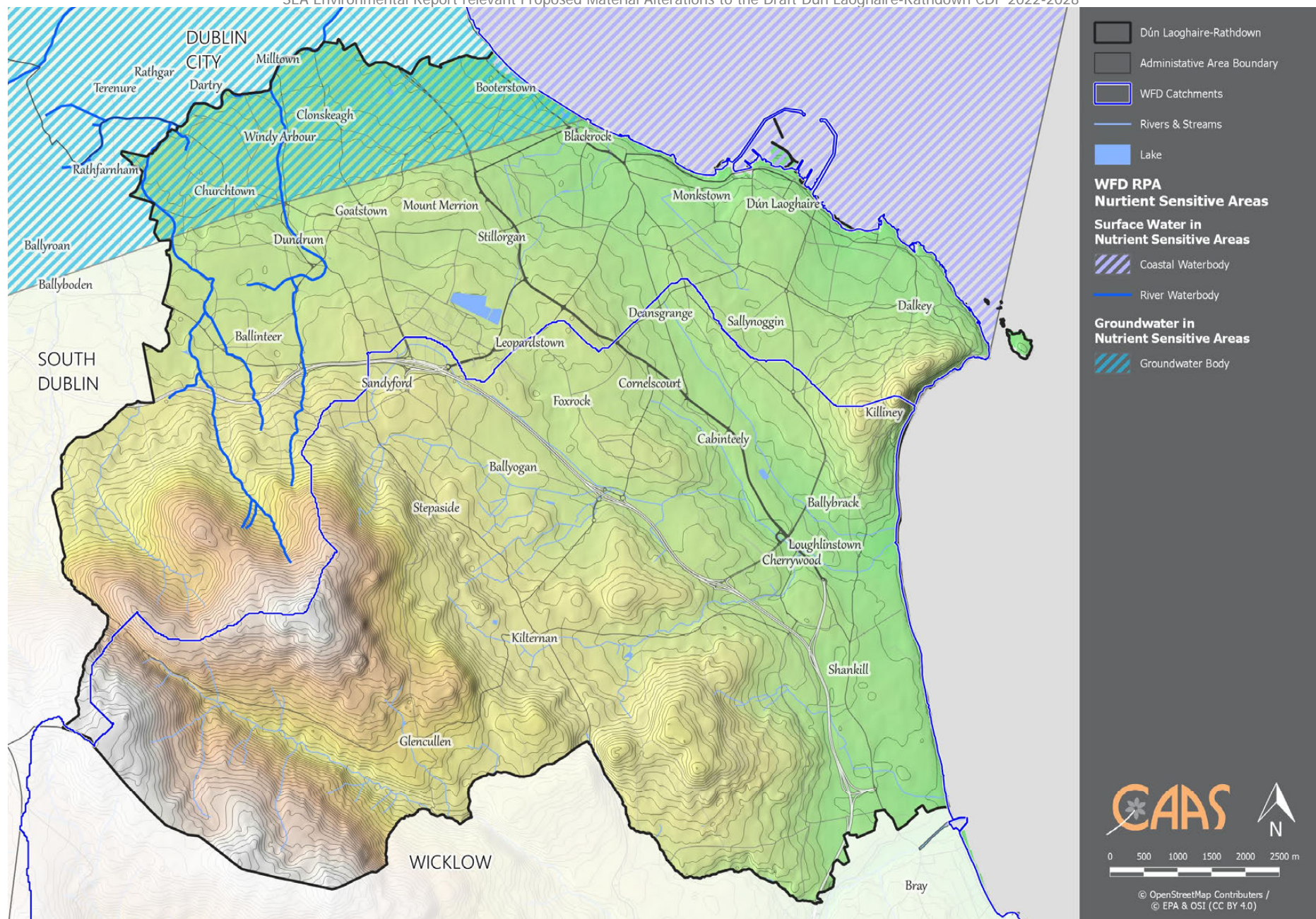


Figure 4.14 WFD Register of Protected Areas: Nutrient Sensitive Areas

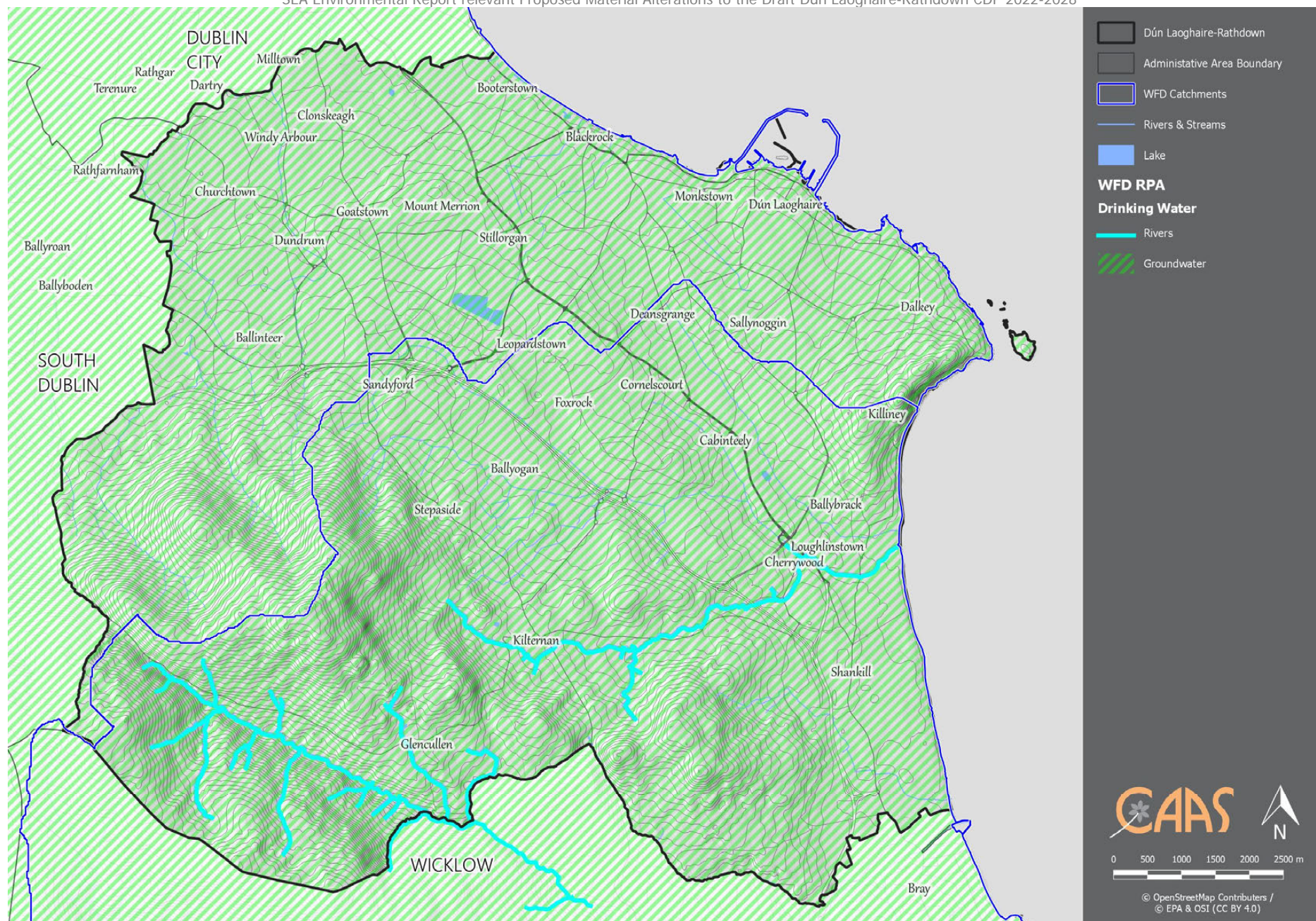


Figure 4.15 WFD Register of Protected Areas: Drinking Water

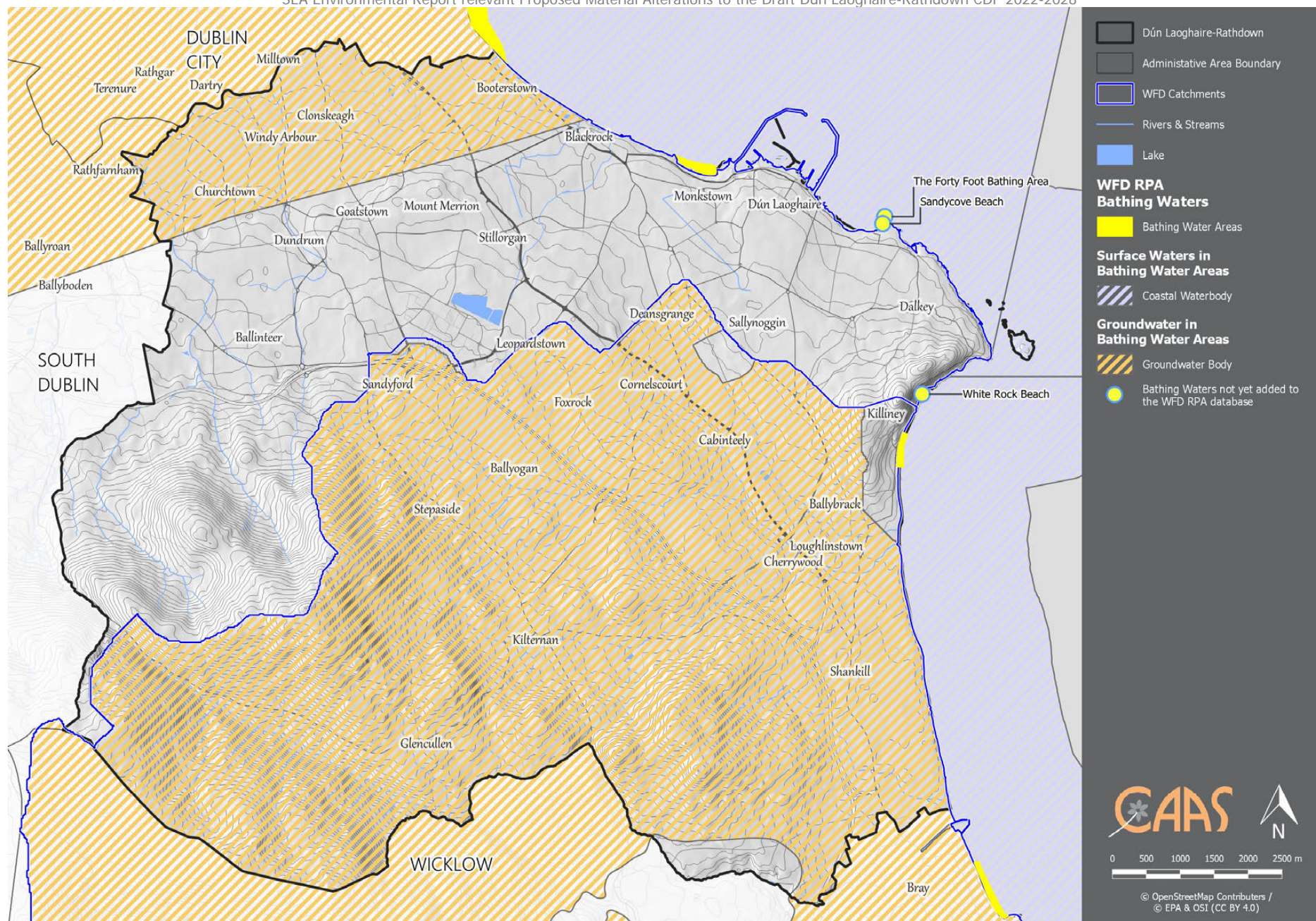


Figure 4.16 WFD Register of Protected Areas: Bathing Waters

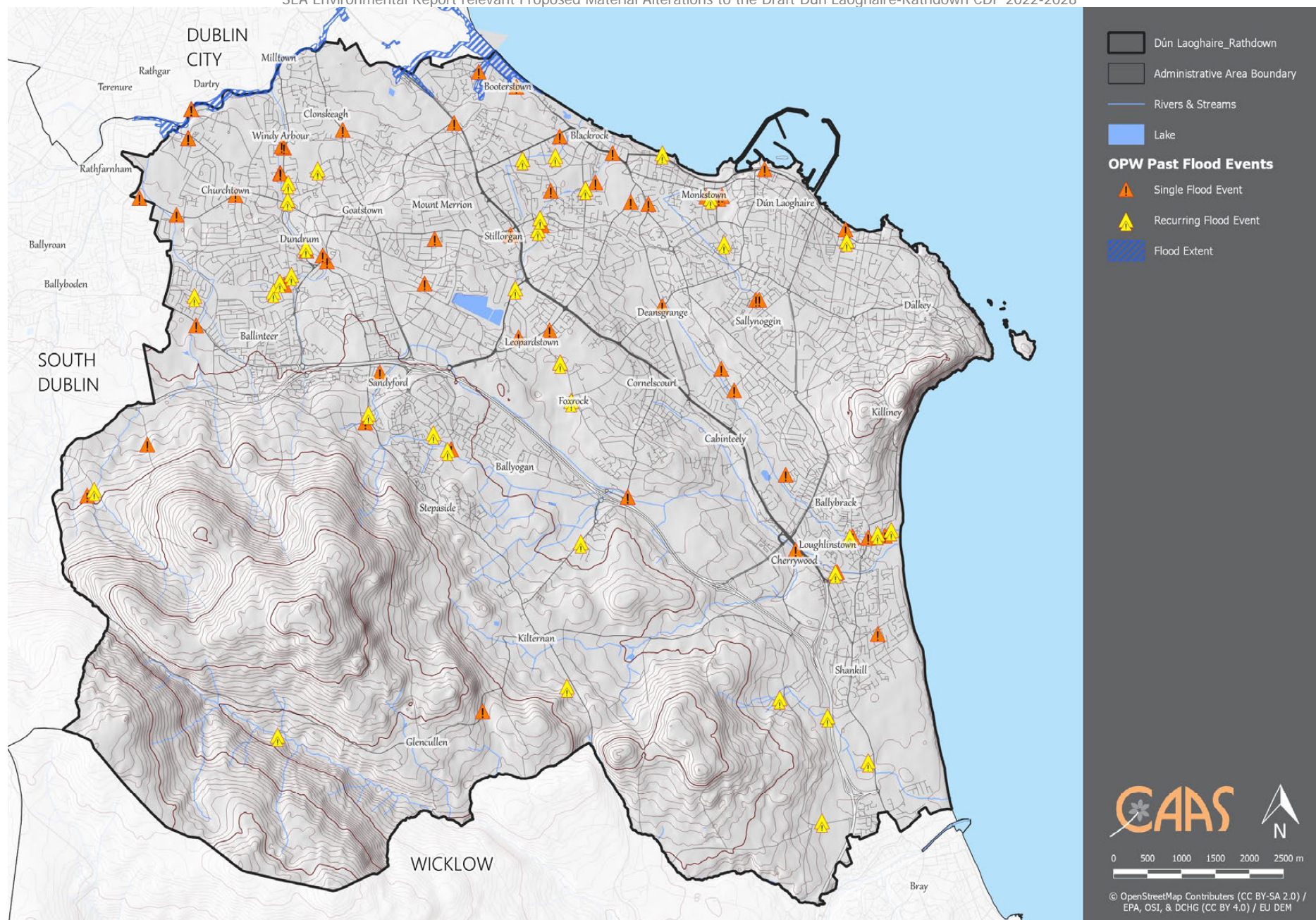


Figure 4.17 Historical Flooding Events

CAAS for Dún Laoghaire-Rathdown County Council

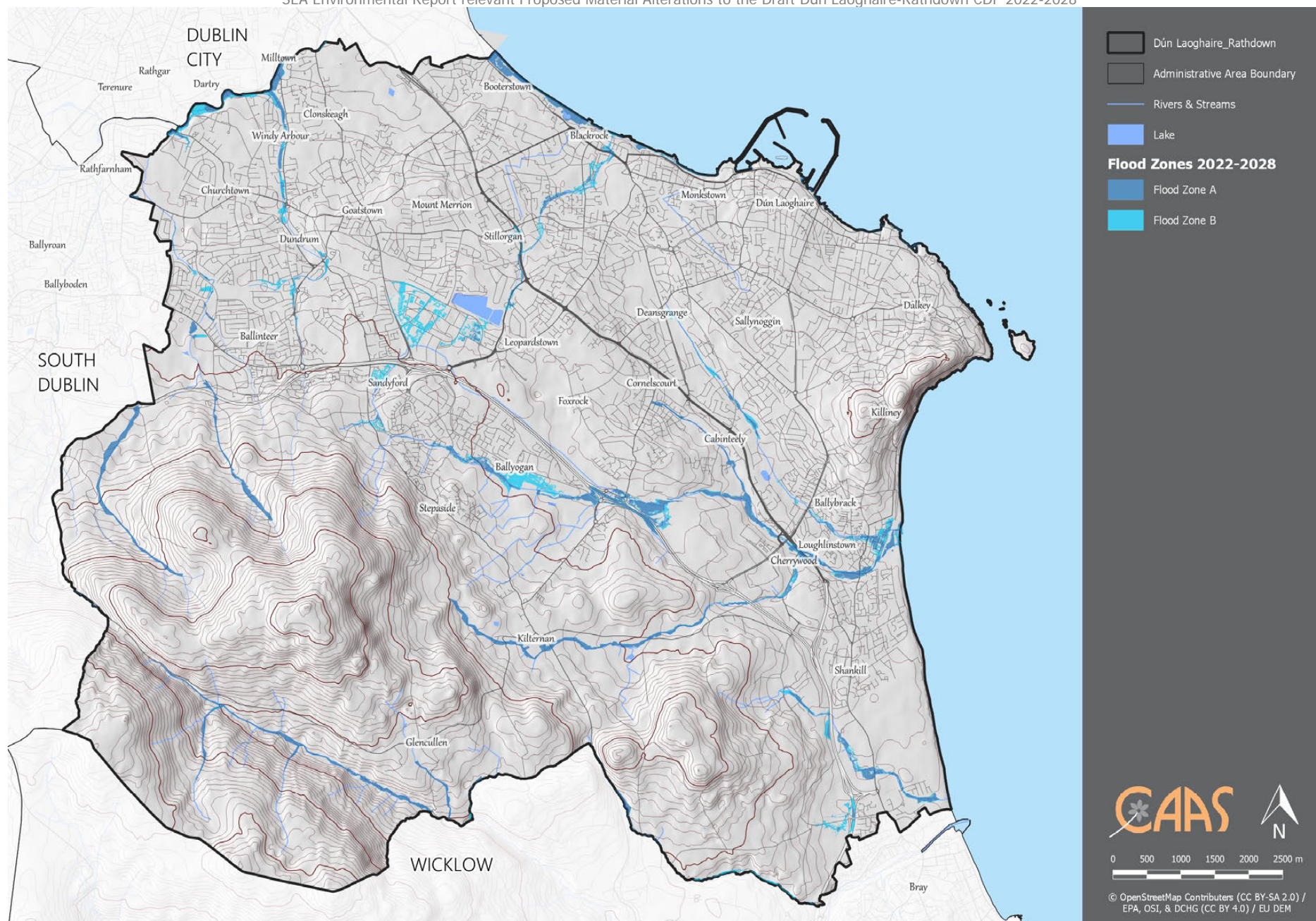


Figure 4.18 Flood Zones (Fluvial and Coastal)

4.10 Air and Climatic Factors

4.10.1 Introduction

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

Ireland's Provisional Greenhouse Gas Emissions 1990-2017 (EPA, 2018) details provisional estimates of greenhouse gas emissions for the period 1990-2017. For 2017, total national greenhouse gas emissions are estimated to be 60.75 million tonnes carbon dioxide equivalent (Mt CO₂eq). This is 0.9% lower (0.53 Mt CO₂eq) than emissions in 2016.

The EPA's 2019 publication *Ireland's Greenhouse Gas Emission Projections 2018-2040* provides an assessment of Ireland's progress towards achieving its emission reduction targets set down under the EU Effort Sharing Decision (Decision No 406/2009/EC) for the years 2013-2020 and a longer-term assessment based on current projections. Ireland's 2020 target is to achieve a 20% reduction of non-Emission Trading Scheme (non-ETS) sector emissions (i.e. agriculture, transport, the built environment, waste and non-energy intensive industry) on 2005 levels with annual limits set for each year over the period 2013-2020.

The report on *Ireland's Final Greenhouse Gas Emissions 1990-2017* (EPA, 2019) identifies that:

- For 2017, the total national GHG emissions are estimated to be 60.74 million tonnes carbon dioxide equivalent (Mt CO₂eq), 0.9% lower than 2016.
- In the last 3 years, national total emissions have increased by 6.4%. In the same period, emissions in the ETS⁹² sector have increased by 5.9%.

- Agriculture emissions increased by 2.9% in 2017 (driven by higher dairy cow numbers and increases in milk production).
- GHG emissions from the Transport sector decreased by 2.4% in 2017. This is the first year of decreased emissions after four successive years of increases in transport emissions.
- Agriculture and Transport accounted for 73.5% of total ESD emissions in 2017.
- Emissions in the Energy Industries sector show a decrease of 6.9% which is attributable to a 5.9% decrease in fossil fuel consumption and an increase of 21.1% and 1.6% in electricity generated from wind and hydro, respectively, in 2017. Renewables now account for 30.1% of electricity generated in 2017, an increase of 3.3% from 2016 figures. Ireland continued to be a net exporter of electricity in 2017. However, exported electricity saw a 4.7% reduction in 2017 to previous 2016 figures.
- Emissions from the Manufacturing Combustion⁹³ sector increased by 3.1% in 2017.
- The Industrial Processes sector emissions increased by 4.1%, mainly from increased cement production. Cement process emissions increased by 2.6% in 2017.
- GHG emissions from the Residential sector decreased by 5.0%. This can be attributed to a milder winter.
- Emissions from the Waste sector decreased by 2.5% in 2017.

The EPA 2019 publication *Ireland's Greenhouse Gas Emission Projections 2018-2040* provides an assessment of Ireland's total projected greenhouse gas emissions out to 2040 which includes an assessment of progress towards achieving its emission reduction targets out to 2020 and 2030 set under the EU Effort Sharing Decision and Effort Sharing Regulation (Regulation (EU) 2018/842). Ireland's 2020 target is to achieve a 20% reduction of non-Emission Trading Scheme (non-ETS) sector emissions (i.e. agriculture, transport, the built environment, waste and non-energy intensive industry) on 2005 levels with annual limits set for each year over the period 2013-2020. Ireland's 2030 target under the Effort Sharing Regulation is a 30% reduction of emissions compared to 2005 levels by 2030. There will be binding annual limits over the 2021-2030 period to meet that target. Key Insights identified as part of the report's package of documents are that:

- There is a long-term projected decrease in greenhouse gas emissions as a result of inclusion of new climate mitigation policies and measures that formed part of the 2018-2027 National Development Plan, which was published in 2018 (and superseded in 2021). This is evident in the

⁹² The EU emissions trading system (EU ETS) was launched in 2005 as the world's first international company-level 'cap-and trade' system for reducing emissions of greenhouse gases cost-effectively. The cap makes sure that CO₂ becomes a product and,

thus, CO₂ is valued at a price, which is determined by the supply and demand at the (trading) market.

⁹³ Manufacturing Combustion; includes combustion of fuels in Industry and Construction, both in ETS and non-ETS

With Additional Measures scenario which assumes full implementation of the programmes, policies and measures included in the 2018-2027 National Development Plan (superseded in 2021).

- Fossil fuels such as coal, peat and gas continue to be key contributors to emissions from the power generation sector. However, a significant reduction in emissions over the longer term is projected as a result of the expansion of renewables (e.g. wind), assumed to reach 41-54% by 2030, with a move away from coal and peat.
- A growth in emissions from the transport sector continues to be projected which is largely attributed to fuel consumption from diesel cars and diesel freight. A decrease in emissions over the longer term, most notably in the With Additional Measures scenario, is largely attributed to assumed accelerated deployment of 500,000 electric vehicles and the impact of greater biofuel uptake.
Agriculture emissions are projected to continue to grow steadily over the period which is mainly a result of an increase in animal numbers particularly for the dairy herd.
- The implementation of additional energy efficiency measures included in the 2018-2027 National Development Plan (superseded in 2021) will see a significant reduction in emissions in the residential, commercial/public services and manufacturing sectors over the projected period.

4.10.2 Climate Action

The National Climate Action Plan 2021 is an all of Government plan to tackle climate change and bring about a step change in Ireland's climate ambition over the coming years. The plan sets out an ambitious course of action over the coming years to address the diverse and wide-ranging impacts climate disruption is having on Ireland's environment, society, economic and natural resources. The Climate Action Plan sets out clear 2030 targets for each sector with the ultimate objective of achieving a transition to a competitive, low-carbon, climate-resilient, and environmentally sustainable society and economy by 2050. The Action Plan deals with both mitigation and adaptation.

Climate mitigation describes 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 use of alternative fuels, including electricity, forms a significant part of government policy to reduce emissions, including from transport. Greater use of alternative fuels, including renewable energy,

has the potential to further contribute towards energy security.

The 2019 emission projections do not consider the impact of new policies and measures that are included in the Government Climate Plan. It is anticipated that future emission projections will include the additional impact of the Government Climate Plan.

The Climate Change Advisory Council's Annual Review 2019 identifies that the most recent projections demonstrate that, under different assumptions, Ireland will not meet its emissions reduction targets, even with the additional policies and measures included in the 2018-2027 National Development Plan (superseded in 2021). The projections also show that progress on reducing emissions is sensitive to the future path of fuel prices. A significant and sustained rate of emissions reduction of approximately -2.5% per year is required to meet our objectives for 2050. However, it must be noted that additional measures within the recent Climate Action Plan are not included in the analysis to date.

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 (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.

4.10.3 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 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).

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 (2020) *Air Quality in Ireland 2019* identifies that:

- Air quality in Ireland is generally good however there are localised issues;
- There was one exceedance of the EU annual average legal limit values in 2019 at one urban traffic station in Dublin due to pollution from transport;
- Ireland was above World Health Organization (WHO) air quality guideline value levels at 33 monitoring sites – mostly due to the burning of solid fuel in cities, towns and villages; and
- There was one exceedance of the EU annual average legal limit values in 2019 at one urban traffic station in Dublin due to pollution from transport.

Problem pollutants identified by the EPA include particulate matter from burning of solid fuel and nitrogen dioxide from transport emissions in urban areas. Indications that Ireland will exceed EU limit values for nitrogen dioxide in the near future.

With regards to solutions, the report identifies that:

- To tackle the problem of particulate matter, clean ways of heating homes and improve energy efficiency of homes can be progressed; and
- To reduce the impact of nitrogen dioxide, transport options in the Government's Climate Action Plan can be implemented and transport choices can be considered by individuals.

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. The current⁹⁴ air quality within the Plan area is identified by the EPA as being *good*.

4.10.4 Noise

'Dublin Agglomeration Environmental Noise Action Plan 2018 – 2023' was prepared in accordance with the requirements of the Environmental Noise Regulations 2006. 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.

Sources of noise in the County include road traffic, rail (DART and heavy rail) and light rail (Luas).

4.10.5 Existing Problems

Legislative objectives governing air and climatic factors in Dún Laoghaire-Rathdown were not identified as being conflicted with.

4.11 Material Assets⁹⁵

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; settlements; resources such as public open spaces, parks and recreational areas; public buildings and services; transport and utility infrastructure (electricity, gas, telecommunications, water supply, wastewater infrastructure etc.); forestry; and natural resources that are covered under other topics such as water and soil.

⁹⁴ 13/10/2020 (<http://www.epa.ie/air/quality/>)

⁹⁵ Much of the text in this section is taken from the Draft Plan

4.11.2 Green Infrastructure

Parks and open space promote health and well-being, provide recreational facilities and range of habitats for various species. Green infrastructure 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.

Council's intention is to review and update the existing Green Infrastructure Strategy for the County in consultation with all key stakeholders and with the public during the lifetime of the County Development Plan 2022-2028. The Strategy will identify key green infrastructure aims, with support the forthcoming 'Dún Laoghaire-Rathdown County Wildlife Corridor Plan 2021' and objectives for the County taking account of the main Policy Objectives identified in the Development Plan.

4.11.3 Land

The Plan seeks to assist with the reuse and regeneration of brownfield sites within and adjacent to the existing built-up footprint of the County thereby contributing towards sustainable mobility and reducing the need to develop greenfield lands and associated potential adverse environmental effects.

4.11.4 Forestry

The largest areas of forestry are found in the south-west of the County, as indicated on Figure 4.3, much of which is owned by Coillte⁹⁶. Woodlands provide recreational opportunities in addition to their heritage and economic benefits. They are also important as links in the county's green infrastructure network.

Coillte forests within the Plan area include Ticknock Forest and the upland areas around Three Rock and Two Rock Mountains. These are a valuable resource in terms of biodiversity, recreation and tourism.

The management of these forests is now under Coillte Nature which has a focus on Biodiversity

and Recreation and is working in conjunction with the Dublin Mountain Partnership.

4.11.5 Peatlands

Peatlands provide a valuable natural and archaeological resource. Peatlands are also important controllers of water levels in river catchments, providing a source of water in dry conditions and soaking up excess water during wetter periods; they actively capture and hold carbon and are an important natural resource in combatting climate change. Cutaway bogs have the potential to facilitate land uses such as employment, renewable energy generation, waste management, industrial, and tourism and recreation. Peat soils are often indicative of areas that are the most sensitive to development due to ecological sensitivities and impeded drainage issues. The ombrotrophic (rain-fed) peat soils in the south-west of the Plan area are subject to ecological designations (see Section 4.6).

4.11.6 Coastline

The 17 km long coastline of Dún Laoghaire-Rathdown is amongst the most sensitive and valuable resources in the County, in terms of natural and cultural heritage, scenic beauty and recreation. The coast is an important economic resource - particularly for the fishing, aquaculture, leisure and tourism industries.

A review of the 'Coastal Defence Strategy Study'⁹⁷ and further coastal protection works are currently under way, including the design of the Corbawn Lane Coastal Protection Works and the preliminary design of the Old Bray Landfill Coastal Protection works.

The OPW have initiated a Pilot Coastal Monitoring Survey Programme at a number of selected locations around the country and Dún Laoghaire-Rathdown will be liaising as appropriate with the OPW and Climate Action Regional Office on progressing with this pilot programme. The long-term aim of the pilot programme is to assist in the assessment of coastal erosion and other changes in the coastline and to help inform decisions on providing new coastal protection infrastructure

⁹⁶ Coillte Teoranta, the State Forestry Board, was established to manage the public forest built up since the commencement of State planting and is the largest provider of forest recreation in Ireland.

⁹⁷ A *Coastal Defence Strategy Study* (2010), prepared for Dún Laoghaire-Rathdown County Council identified specific coastal

protection measures and provided a risk assessment of the vulnerability of the study area and hinterland to both erosion and coastal flooding. This study provided a framework for decision making in relation to development along the coast.

and to assess the performance of existing coastal protection infrastructure.

4.11.7 Renewable Energy Potential

Under EU Directive 2001/77/EC Renewable Energy, renewable energy sources are defined as renewable non-fossil energy sources such as, but not limited to wind, solar, geothermal⁹⁸, wave, tidal, hydropower, biomass, landfill gas, sewage treatment plant gas, bio-gases and bio-char (i.e. the thermal treatment of natural organic materials in an oxygen-limited environment). There is potential for renewable energy development in the County and the Plan seeks to facilitate such development in a sustainable manner.

4.11.8 Minerals and Aggregates

Minerals such as iron and copper and aggregates such as sand and gravel can occur throughout the country. Minerals and aggregates are essential to manufacturing and construction.

Minerals localities within Dún Laoghaire-Rathdown are shown on Figure 4.19. The GSI have a suite of data sources available that would 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.

4.11.9 Transport

Transport infrastructure in the County has the potential to support reductions in energy demand from the transport sector, including through electrification of modes.

The Plan area is well served by public transport, road links and cycle network. Two major road networks – the M50 and the M11/N11 traverse the Plan area.

Project Ireland 2040 and the Transport Strategy for the Greater Dublin Area 2016-2035 have set

out a number of transport projects that will serve the Plan area, such as the Greater Dublin Area Cycle Network Plan, strategic pedestrian network plan, Metro Link, BusConnects, priority elements of the DART expansion project, a new DART station at Woodbrook, a Park and Ride programme including Woodbrook and Carrickmines and the Luas Green Line capacity enhancement. The Transport Strategy for the Greater Dublin Area, the Regional Spatial and Economic Strategy for the Eastern and Midland Region and Project Ireland 2040 also provide for M50 and M11 road improvements. Local projects in the County include the recently granted Kiltiernan/Glenamuck District Distributor Road, which will unlock development in the Kiltiernan/Glenamuck area.

The Dublin Metropolitan Area Strategic Plan (MASP) sets out a strategic planning and investment framework for the growth of the Dublin Metropolitan area over a 12 to 20-year horizon. The MASP comprises an integrated land-use and transportation strategy and identifies strategic corridors based on their capacity to achieve compact sustainable and sequential growth along key public transport corridors. The corridors of relevance to the County include the: North-South Corridor (DART); and the MetroLink/Luas Green Line Corridor. Within the North-South Corridor (DART), the MASP identifies Woodbrook-Shanganagh, Old Connaught and lands at the former Bray Golf Course and Harbour lands as suitable for the development of new residential communities. Within the Metrolink/LUAS Green Line Corridor, Ballyogan and Environs and Kiltiernan-Glenamuck are identified as new residential communities, while Cherrywood and Sandymount are identified as new and emerging mixed-use districts.

4.11.10 Water Services

4.11.10.1 Wastewater

From January 2014, Irish Water became responsible for all public water services, involving the supply of drinking water and the collection, treatment and disposal of wastewater. Irish Water is also responsible for the treatment and disposal of the sludge that is generated from both its water and wastewater treatment plants. The Council is an agent of

⁹⁸ The GSI's Geothermal mapping was cited in a submission by GSI made on the initial public consultation on the Council's Issues Paper, available to prospective developers of domestic and commercial geothermal energy generation, identifies that much of the County is

"unsuitable" for such generation, with some areas in the north and south of the County identified as "probably suitable" and an area around Enniskerry identified as "suitable" for commercial and "highly suitable" for domestic.

Irish Water 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 County.

The provision of well-maintained quality wastewater treatment infrastructure is essential to facilitate sustainable development of the County in line with the Settlement and Core Strategy while also protecting the environment and public health. Irish Water is now responsible for the collection, treatment and disposal of wastewater where public wastewater facilities exist in towns and villages. In unserved areas and outside the main towns and villages, the main method of sewage disposal is by means of individual septic tanks and proprietary wastewater treatment systems.

The EPA's 2019 report *'Urban Wastewater Treatment in 2018'* identified that:

- Wastewater treatment at 21 large urban areas did not meet European standards;
- Raw sewage is released into the environment from 36 urban areas;
- Wastewater from 57 areas is the sole threat to waters at risk of pollution;
- Wastewater contributed to poor quality bathing waters at three beaches in 2018;
- Discharges from 13 areas must improve to protect freshwater pearl mussels;
- Disinfection systems must be installed at two villages to safeguard shellfish; and
- Eight wastewater collection systems have been found non-compliant with European Union requirements.

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

The Plan area is served by two Wastewater Treatment Plants (WWTPs) providing secondary treatment: Ringsend WWTP (D0034-01), with a design capacity of 1.64 million PE⁹⁹ and located in the north-west part of the Dublin City; and Shanganagh-Bray WWTP (D0038-01), with a design capacity of 186,000 PE and located within the Plan area to the south-east.

The Shanganagh-Bray WWTP¹⁰⁰ was identified by the EPA as fully compliant with the Emission Limit Values as set out in the Wastewater Discharge Licence, however the Ringsend WWTP¹⁰¹ was identified to be non-compliant due to overloading.

Irish Water has provided information on wastewater treatment capacity, constraints and projects planned within the Plan area to improve the existing network, to assist the Council in the preparation of the new County Development Plan (Figure 4.20). Irish Water indicated where there may be wastewater treatment capacity available to accommodate growth ("headroom") in terms of population equivalent (PE) in areas serviced by a public wastewater treatment plant.

Spare treatment capacity is currently available in Shanganagh-Bray WWTP (59,965).

The Ringsend WWTP partially serving the Plan area is identified as a priority area where improvements are required to resolve urgent environmental issues with respect to wastewater treatment. The Ringsend WWTP was also identified by the EPA as:

- One of 21 large urban areas that failed to meet the European Union's legally binding standards for the treatment of urban wastewater in 2018;
- One of 57 areas where the EPA identified wastewater discharges as the sole significant pressure on water bodies at risk of pollution; and
- One of the areas where wastewater discharges contributed to poor quality bathing water in 2018 in two bathing locations north of the Plan area: Merrion Strand and Sandymount Strand.

The limitation in capacity and performance of the waste water treatment facility at Ringsend is a regional issue that affects various planning authorities. It is a Policy Objective of the Plan that the Council will, in conjunction with the Eastern and Midland Regional Authority, where Appropriate, work with and support Irish Water in the delivery of the strategic objectives and strategic water and wastewater projects and infrastructure, so as to ensure provision of infrastructure to service settlements in accordance with the Core Strategy of the new County Development Plan and the settlement strategy of the RSES.

⁹⁹ As identified in Irish Water's Water Services Strategic Plan, wastewater treatment plants are described in terms of their designed treatment capacity, which is generally expressed as population equivalent (PE). This is a measurement of total organic biodegradable load, including industrial, institutional, commercial and domestic organic load, on a wastewater treatment plant,

converted to the equivalent number of PEs. One person is considered to generate 60g of five-day Biochemical Oxygen Demand (BOD) per day. 1 PE is defined as being equivalent to 60g of BOD per day.

¹⁰⁰ Irish Water Annual Environmental Report 2019.

¹⁰¹ Irish Water Annual Environmental Report 2018.

The limitation in capacity and performance of the waste water treatment facility at Ringsend is a regional issue that affects various planning authorities. In 2019, An Bord Pleanála granted permission for the works required to facilitate the use of Aerobic Granular Sludge (AGS) technology, to omit the previously permitted long sea outfall tunnel and to upgrade the sludge treatment facilities at Ringsend, Dublin 4, and to provide for a Regional Biosolids Storage Facility in Newtown, Dublin 11.

Irish Water is responsible for the treatment and disposal of the sludge that is generated from both its water and wastewater treatment plants. Irish Water has prepared a National Wastewater Sludge Management Plan 2016-2021 that outlines Irish Water's strategy to ensure a nationwide standardised approach for managing wastewater sludge over a 25-year period. A separate plan will be prepared in relation to sludge produced at drinking water plants.

4.11.10.2 Water Supply

Irish Water is responsible for providing and maintaining adequate public water supply infrastructure throughout the County. Dún Laoghaire-Rathdown falls within the Water Supply Zone for the Greater Dublin Area and supply in the area is currently constrained. Irish Water has a number of new supplies coming into operation in 2020/2021, including Peamount-Saggart Pipeline, Srowland Supply Area Expansion, Vartry Water Treatment Upgrade and the Leixlip upgrade. The long-term development of the GDA region, will be dependent on the Water Supply Project for the Eastern Region. Until then, the availability of water will be on a first come, first served basis with priority given to domestic customers. Non-domestic developments will be asked to review their proposals to reduce water requirements. In the meantime, leakage control and water conservation will be of utmost importance.¹⁰²

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 Roundwood Water Supply is listed on the most recent EPA RAL (Q2 of 2020) due to elevated levels of THMs above the standard in the Drinking Water Regulations and treatment and management issues. This Water Supply Scheme has a supply volume of 7,237 m³/day, serving a population of 40,730 people. The proposed plan of action to remedy this issue is to improve operations at the water treatment plant and to upgrade the Vartry Water Treatment Plant by June 2021.

Currently, Irish Water is developing the National Water Resource Plan outlining how to move to a sustainable, secure and reliable public drinking water supply over a 25-year period while safeguarding the environment. It will outline how Irish Water intends to maintain a balance between supply from water sources around the country and demand for drinking water over the short, medium and long term. This will facilitate future planning and ensure provision of sufficient, safe, clean drinking water to facilitate the social and economic growth of the County.

It is the policy of the Council to work in conjunction with Irish Water to protect existing water infrastructure, to maximise the potential of existing capacity and to facilitate the timely delivery of new wastewater services infrastructure to facilitate future growth.

4.11.10.3 Surface Water Drainage

Sustainable Urban Drainage systems (SUDS) can minimise the quantity and increase the quality of surface water runoff as well as mitigating 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. The Irish Water study of three Drainage Area Plans is underway to address the network issues and develop solutions:

- West Pier (Ringsend WWTW) – Contractor's Surveys continuing into 2020 (study due to be completed in 2021);
- Bray/ Shanganagh (Shanganagh WWTW) at Stage 3 Growth Forecast Analysis Study (due to be completed in 2020); and

¹⁰² Irish Water (February 2020)

- Dodder Valley (Ringsend WWTW) - Contractor's Surveys continuing into 2020 (study to be completed in 2022).

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

4.11.11 Waste Management

The Eastern and Midland Waste Region comprises 12 local authority areas of Dublin City, Fingal, Dún Laoghaire-Rathdown, Kildare, Laois, Longford, Louth, Offaly, Meath, Wicklow, Westmeath and South Dublin. The Eastern-Midlands Waste Management Plan 2015-2021 provides the framework for solid waste management in the region and sets out a range of policies and actions to meet specified mandatory and performance-based targets. It is underpinned by National and European waste legislation and the work carried out will ensure the continued management of waste in a safe and sustainable manner. The plan includes eight Strategic Objectives and three overarching targets:

- 1% reduction per annum in the quality of household waste generated per capita;
- Reduce to 0% the direct disposal of unprocessed municipal waste to landfill (from 2016 onwards) in favour of higher value pre-treatment processes and indigenous recovery practices; and
- Recycling rate of 50% of managed municipal waste by 2020.

The Eastern-Midlands Waste Management Plan states that the future role of local authorities in waste management will be focused on education, prevention, and resource efficiency activities as well as regulating householders, businesses and waste operators and enforcing waste legislation. Waste infrastructure provided by local authorities will mainly include bring banks and civic amenities.

4.11.12 Existing Problems

There are a number of challenges with respect to the provision of water services infrastructure that are described under Section 4.11 above.

The Water Services Section of Dún Laoghaire-Rathdown County Council will co-operate with Irish Water in providing and maintaining adequate public water supply and wastewater collection and treatment infrastructure throughout the County for the period of the plan and beyond. In conjunction with Irish Water, the Water Services Section of Dún Laoghaire-Rathdown County Council will endeavour to ensure the continued investment in and delivery of improvements to water infrastructure over the Plan period through the implementation of the Capital Investment Plan.

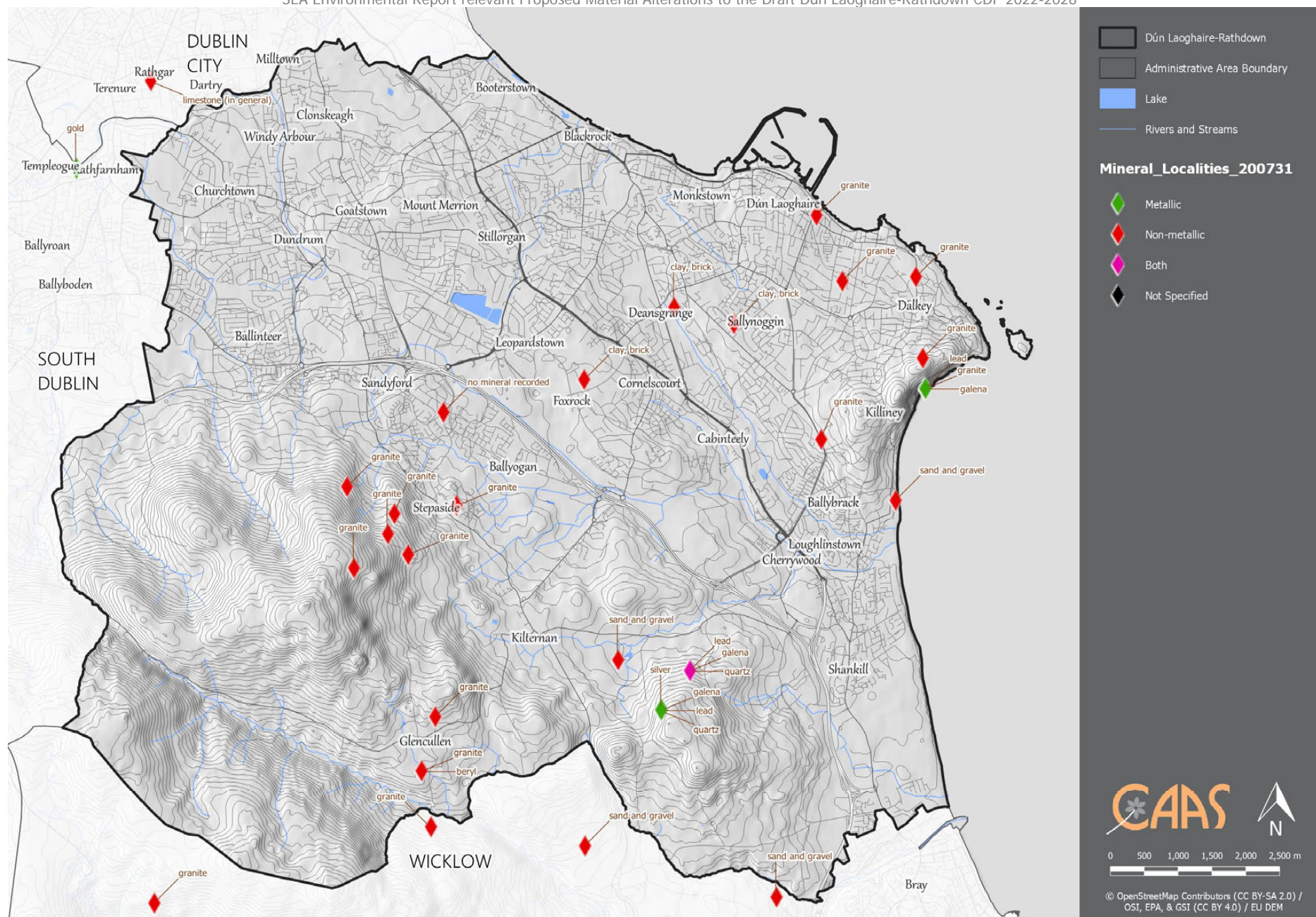


Figure 4.19 Minerals Localities

Wastewater Treatment	Agglomeration	Serves other areas?	Treatment Level	Capacity - today (PE)	Capacity - by 2021 if different (PE)	Load - in 2019 (PE)	Capability - now or by 2021	Headroom (PE)	Additional comments
Ringsend WWTP	Ringsend	Yes	2 - Secondary Treatment	1,640,000	2,100,000	1,760,000	WWDA	-687,680	West Pier and Dodder Valley Catchments dependent on Ringsend upgrades.
Shanganagh WWTP	Shanganagh	Yes	2 - Secondary Treatment	186,000	/	127,618	WWDA	59,965	This catchment ok, with some network constraints shown on map below.

Waste Water Networks

	COMMENTS	PROJECTS
1	Required: upgrade of existing 300mm sewer to 450mm from Landscape Rd and Braemor Rd. junction up to Dodder Valley Sewer	Landscape Road, Churchtown Local Network Reinforcement Project (on Capital Investment Plan)
2	Required: 225mm sewer upgrade to 450mm in Goatstown Road	Goatstown Road LRNP (on Capital Investment Plan, 2022)
3	Flooding from Blackthorn Avenue and Brewery Road Sewers	Sandyford Tank Sewer (on CIP - design stage)
4	WW network constraints, frequent overflows downstream of Sandyford Village; LNRP recommends further studies to determine a solution. DW network possible constraints as per the LRNP	Enniskerry Rd./Blackglen Rd. LNRP - not on CIP
5	Required new combined waste water sewers (375, 525, 600 mm) to connect to existing Carrickmines 700mm sewer	Torquay Rd., Leopardstown LNRP. The LNRP scheme is no longer on the CIP. This will need to be assessed under the Drainage Area Plan.
6	Required: diversion the existing 450mm sewer into downstream 750m existing sewer	Johnstown Road, Cabinteely LNRP (2020)
7	LIHAF/LA sites	Kiltiernan Network Extension Plan (date?)
8	225 mm in Corbawn Lane capacity issue (low gradient)	not on CIP
9	LIHAF project for dart only; MUHDS portion	Woodbrook Network Extension (Gate1-2) - (end Gate 3-4:2021). Shanganagh/Bray Drainage Area Plan (Stage 2)
10	Required: 225mm sewer along Old Connaught Av. upgrade to 375mm and new 450mm sewer to connect to 900mm river crossing to Bray PS	Old Connaught LRPN (on Capital Investment Plan, 2020)

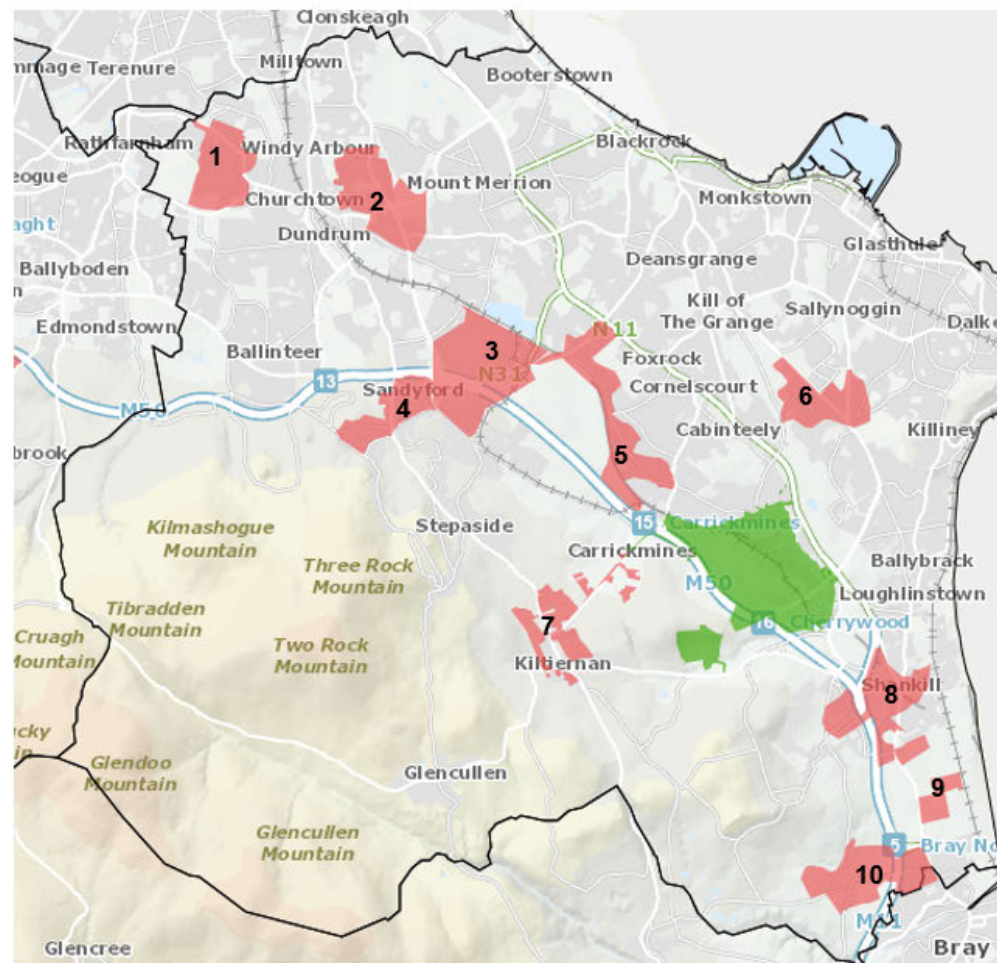


Figure 4.20 Wastewater Constraints in Dún Laoghaire-Rathdown (Irish Water, February 2020)

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 period, medieval buildings, 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

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.

A Sites and Monuments Record (SMR)¹⁰³ is a manual containing a numbered list of all certain and possible monuments accompanied. An Urban Archaeology Survey was completed in 1995 and contained reports on historic towns dating to before 1700 A.D. with a view to delineating zones of archaeological potential (SMR Zones of Notification). The SMR formed the basis for issuing the RMP.

Figure 4.21 shows the spatial distribution of recorded monuments and associated SMR and RMP Zones of Notification in the County. There are hundreds of Recorded Monuments within the Plan area. Clusters of monuments are concentrated within and adjacent to the existing built-up footprint of the County and in the rural areas. Enclosures, fulacht fias, castles, churches and graveyards are amongst the most common recorded monuments in the Plan area.

There are sixteen Monuments in State Care (twelve in State Ownership and four in State Guardianship)¹⁰⁴ in the Plan area, including:

- Ballyedmonduff Wedge Tomb;
- Brenanstown Portal Tomb;
- Archbold's Castle Dalkey;
- Dalkey Island Church;
- Glencullen Standing Stone;
- Kilgobbin Cross;
- Kill of the Grange Church, Well and Bullaun Stone;
- Killiney Church;
- Kilmashogue Wedge Tomb;
- Kiltiernan Portal Tomb;
- Lehaunstown Crosses and wedge tomb;

¹⁰³ The RMP was issued for each county between 1995 and 1998 in a similar format to the existing SMR. However, the RMP differs from the earlier lists in that, as defined in the Act, only monuments with known locations or places where there are believed to be monuments are included. The large archive and supporting database are managed by the National Monuments Service and the records are continually updated and supplemented as additional

monuments are discovered. (<https://data.gov.ie/dataset/national-monuments-service-archaeological-survey-of-ireland>).

¹⁰⁴ This list of National Monuments in State care includes those which are in the ownership and guardianship of the Minister for the Environment, Heritage and Local Government.

- Tully Church, Lahaunstown;
- Tibbradden Cairn Burial Cairn;
- Monkstown Castle; and
- Rathmichael Early Medieval Ecclesiastical Site.

The Ballybetagh Cairn in the south of the Plan area and the Ballycorus Leadmine (flue and chimney) near Kiltiernan are National Monuments Protected under Preservation Order.

There are many important sites of significant archaeological interest, such as: Dalkey, designated a Historic Town and Zone of Archaeological Potential, with historic buildings and plots from the medieval period, Dalkey Castle and Dalkey Island Church; and the remains of Carrickmines Castle, adjacent to the M50 motorway and which include the stone revetted enclosures built in the early thirteenth century and the remains of a stone gatehouse. Other notable monuments include: the megalithic wedge tomb at Ballyedmonduff; the Kiltiernan Portal Tomb; the Lead Mines chimney at Carrickgollogan; and Dún Laoghaire harbour, one of the largest man-made harbours in the world.

The 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 from 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 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, estuaries and marine and coastal areas within and adjacent to the County 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 curtilage¹⁰⁵ 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 County's settlements as shown on Figure 4.22.

There are close to 2,100 entries to the Record of Protected Structures within the County¹⁰⁶, which include many notable buildings in the

¹⁰⁵ Curtilage is normally taken to be the parcel of ground immediately associated with the Protected Structure, or in use for the purposes of the structure. Protection extends to the buildings and land lying within the curtilage. While the curtilage sometimes coincides with the present property boundary, it can originally have included lands, features or even buildings now in separate ownership, e.g. the lodge of a former country house, or the garden

features located in land subsequently sold off. Such lands are described as being attendant grounds, and the protection extends to them just as if they were still within the curtilage of the Protected Structure.

¹⁰⁶ Draft Dún Laoghaire-Rathdown County Development Plan 2022-2028

County such as: the Martello Tower in Sandycove; the Blue Church in Kiltiernan and Shanganagh Castle; Marlay House; Cabinteely House; Martello Towers and Carnegie Libraries; and the Dún Laoghaire Baths Pavilion.

There are many important historical structures located along the coastal areas in the County, including: Dún Laoghaire Harbour and smaller Coliemore and Bullock Harbours; the East Pier Lighthouse in Dún Laoghaire; various slipways; bathing structures; steps seawalls; and follies.

The examples of industrial heritage within the County include: the Dublin and Kingstown Railway; the chimney flue at Ballycorus; lead mines at Carrickgollogan; and the Nine Arches Bridge in Milltown.

In addition to Protected Structures, the Planning and Development Act, 2000 provides the legislative basis for the protection of Architectural Conservation Areas (ACAs). An ACA is a place, area or group of structures or townscape that is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or value, or contributes to the appreciation of protected structures, whose character it is an objective to preserve in a development plan. The ACA designation requires that planning permission must be obtained before significant works can be carried out to the exterior of a structure in the ACA that might alter the character of the structure or the ACA. There are various ACAs designated in the Plan area (as shown on Figure 4.22). These range from range from groups of artisan and estate workers cottages, planned residential Victorian squares to large areas of residential suburbs and villages.

The National Inventory of Architectural Heritage (NIAH) is a State initiative 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 Culture, Heritage and the Gaeltacht 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 4.22 shows entries to NIAH within the Plan area.

4.12.3 Existing Problems

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

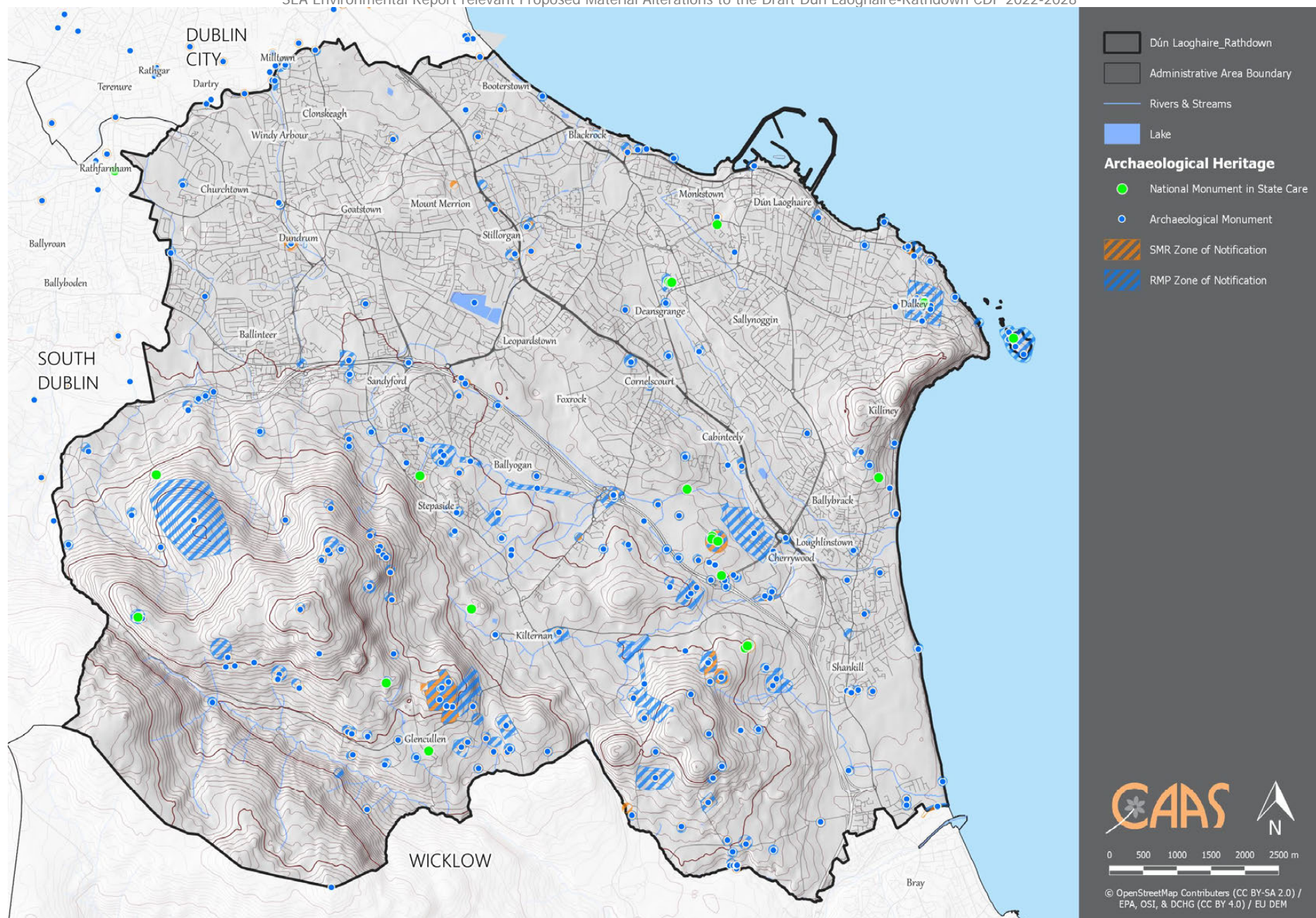


Figure 4.21 Archaeological Heritage

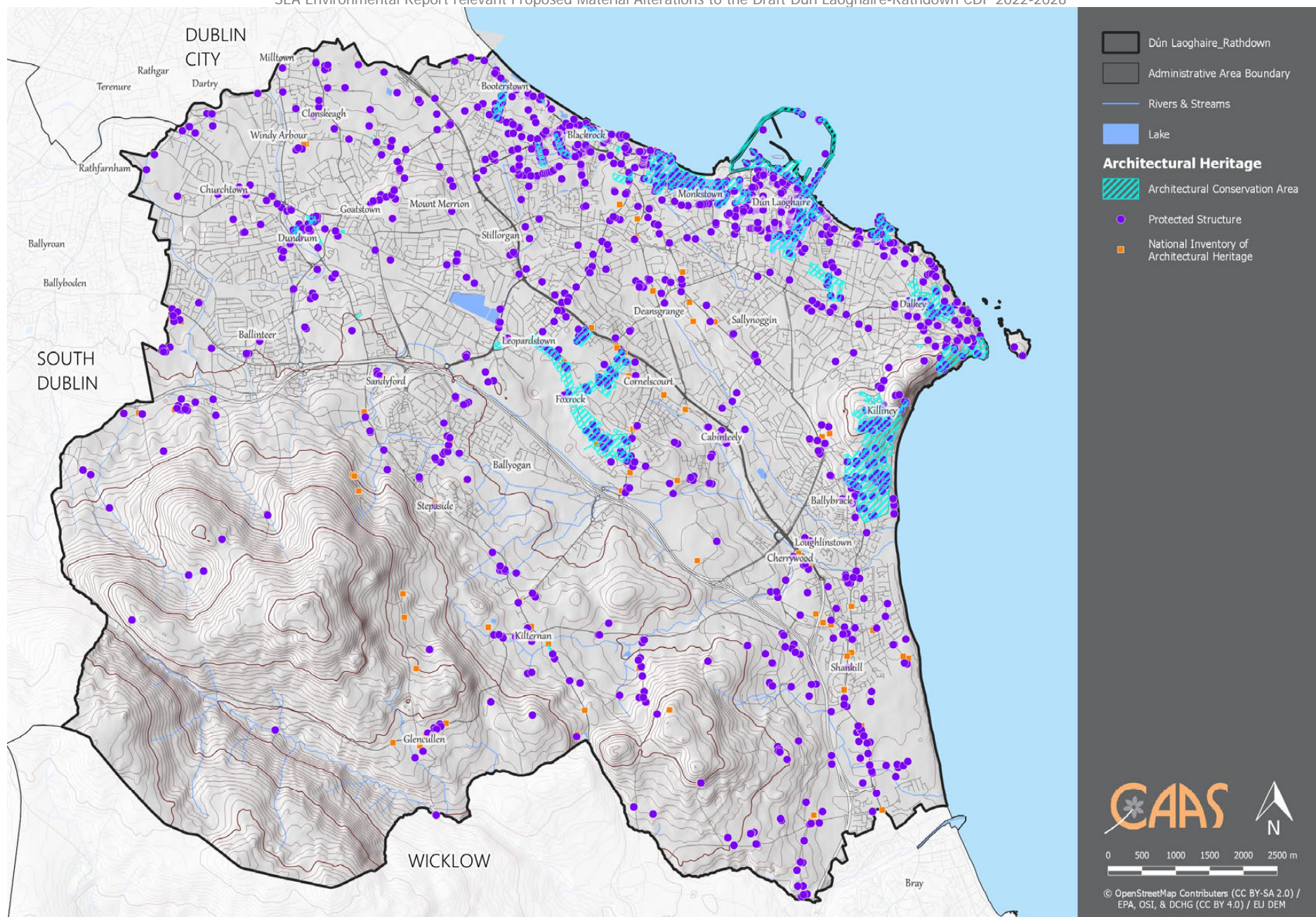


Figure 4.22 Architectural Heritage

CAAS for Dún Laoghaire-Rathdown County Council

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.

The east boundary of the Plan area runs along the coastline which includes beaches cliffs and marshes. To the south and west of the Plan area gives a way to agricultural lands and then rises into the upland scenic area of the Dublin Mountains. The coast and the Dublin Mountains are significant features of the Plan area and are used for variety of purposes, including amenity, recreation, commercial, industrial, sporting and military. They represent areas of high landscape quality, natural heritage and amenity value.

4.13.2 Landscape Character Areas

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.

The Plan identifies 14 Landscape Character Areas (shown on Figure 4.23), comprising:

- LCA 1 - Kilmashogue Valley;
- LCA 2 - Western Half of Kellystown Road;
- LCA 3- Ticknock Road;
- LCA 4 - Marlay Park;
- LCA 5 - Kiltiernan Plain;
- LCA 6 – Ballycorus;
- LCA 7 - Glencullen Valley;

- LCA 8 - Glendoo Valley;
- LCA 9 – Barnacullia;
- LCA 10 – Rathmichael;
- LCA 11 – Ballyman;
- LCA 12 – Shanganagh;
- LCA 13 – Carrickmines; and
- LCA 14 - Cherrywood Rathmichael.

4.13.3 TPOs, Trees, Group of Trees and Woodlands

TPOs, certain trees, groups of trees and woodlands (shown on Figure 4.6) have been identified in the County Development Plan. Robust and appropriate levels of protection are provided for trees and tree groups identified, with a long-term aim of linking groups together to provide more robust tree assemblages.

4.13.4 Protected Views and Prospects

The Plan area encompasses many sites and vantage points from which views over areas of great natural beauty, local landmarks, historic landscapes, adjoining Counties and the City of Dublin may be obtained. In addition to scenic views, the Plan area also contains important prospects i.e. prominent landscapes or areas of special amenity value or special interest which are visible from the surrounding area. Specific Views and Prospects for protection have been identified in the Plan and are considered when assessing planning applications. Protected views and prospects in Dún Laoghaire Rathdown are shown on Figure 4.24.

4.13.5 High Amenity Areas

The Plan also identifies High Amenity Areas. These areas consist of landscapes of special value where inappropriate development, would contribute to a significant reduction of the landscape setting of the County. They include the Glencullen Valley, Glendoo Valley and Kilmashogue Valley.

The areas immediately adjacent to the High Amenity Areas are also sensitive landscapes. Development in these areas, may affect directly or indirectly the quality and integrity of the adjoining High Amenity areas. Within these areas, the presumption will be generally to resist any development not directly related to the area's amenity potential or its existing use for agriculture, mountain, or hill farming.¹⁰⁷

¹⁰⁷ Draft Dún Laoghaire-Rathdown CDP 2022-2028

High Amenity Areas and Rights of Way (which give access by the public to amenity areas) in Dún Laoghaire-Rathdown are shown on Figure 4.24.

4.13.6 Existing Environmental Problems

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

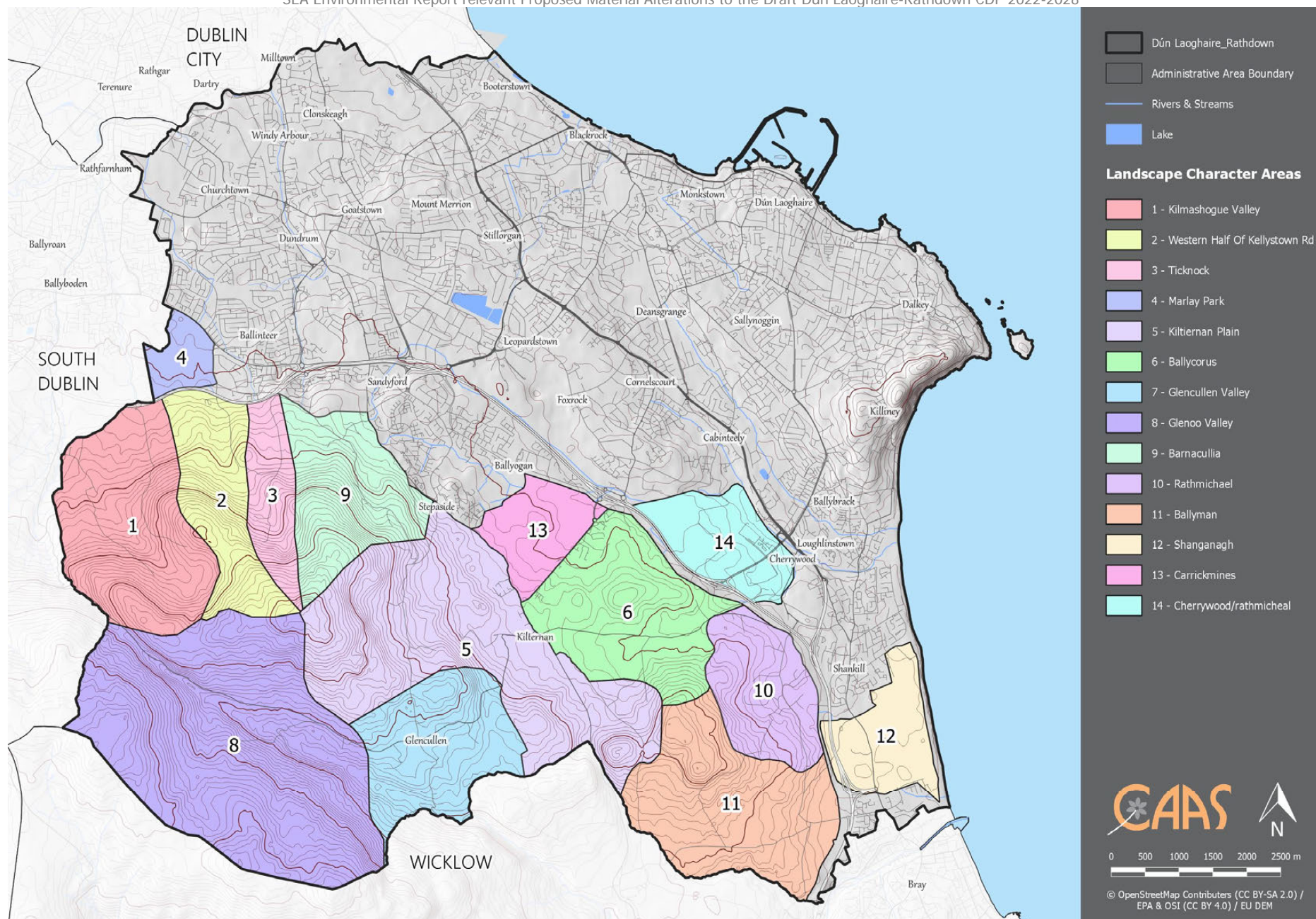


Figure 4.23 Landscape Character Areas

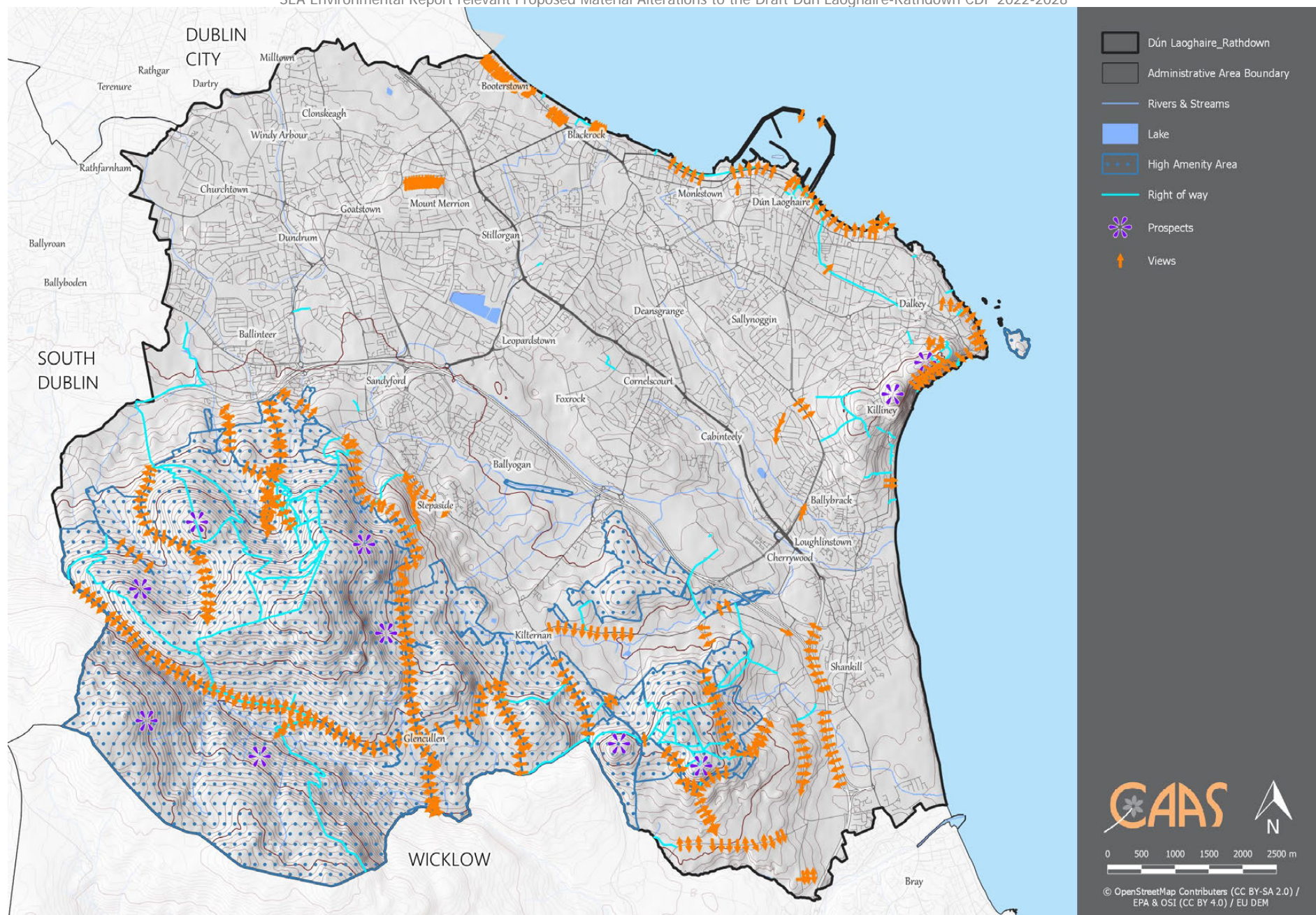


Figure 4.24 Landscape Designations

CAAS for Dún Laoghaire-Rathdown County Council

4.14 Overlay of Environmental Sensitivity Mapping

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

Figure 4.25 provides an Overlay of Environmental Sensitivities in the County. Environmental sensitivities are indicated by colours which range from higher to lower sensitivity. The map was prepared using Geographical Information System (GIS) software that allowed for a weighting system to be applied with differentiation in certain layers as follows:

- European Sites – SACs and SPAs (10 points);
- Other Ecological designations – NHAs and pNHAs (5 points);
- Sensitive Landcover Categories (10 points);
- WFD Status of Surface moderate and unassigned ecological status (5 points);
- WFD Status of Surface water poor ecological status (10 points);
- Groundwater vulnerability (aquifers which are extremely vulnerable - 10 points; and highly vulnerable - 5 points);
- Source Protection Areas (Inner Protection Area 10 points);
- WFD RPA Nutrient Sensitive Rivers and Lakes (10 points) and Rivers in Nutrient Sensitive Areas (5 points);
- WFD RPA Rivers and Lakes for Drinking Water (10 points);
- County Geological Sites (10 points);
- GSI Landslide Susceptibility (High or High Inferred – 10 points; Moderately High or Moderately High Inferred – 5 points);
- Preliminary Flood Risk Assessment Flood Zone A (10 points) and Flood Zone B (5 points);
- Cultural Heritage including Architectural Conservation Areas, entries to the Record of Protected Structures, entries to the Record of Monuments and Places, National Monuments in State Care and entire to the National Inventory of Architectural Heritage (10 points);
- Broad Zones (10 points); and
- Scenic routes (10 points).

Where the mapping shows a concentration of environmental sensitivities there is an increased likelihood that development will conflict with these sensitivities and cause environmental deterioration. However, the occurrence of environmental sensitivities does not preclude development; rather it flags at a strategic level that the mitigation measures - which have been integrated into the Plan - will need to be

complied with in order to ensure that the implementation of the Plan contributes towards environmental protection.

The overlay mapping shows that environmental sensitivities are not evenly distributed throughout the County. Most of the County is identified as having low to moderate levels of sensitivity.

The most sensitive areas in the County include:

- Parts of the rural areas in the south west of the County, on account of the High Amenity Area designation, archaeological heritage sensitivities, areas of extreme and high groundwater vulnerability and European Site ecological designations along the borders with South Dublin and Wicklow County Councils;
- Parts of the coastline and adjacent coastal areas, on account of European Site and proposed Natural Heritage Area ecological designations, Protected Views and Prospects, extreme groundwater vulnerability and coastal flood risk;
- Certain locations and areas within the existing built-up footprint of the County, on account of cultural heritage designations, including entries to the Record of Monuments and Places, Entries to the Record of Protected Structures and Architectural Conservation Areas; and
- Certain areas that are adjacent to streams and rivers, on account of flood risk.

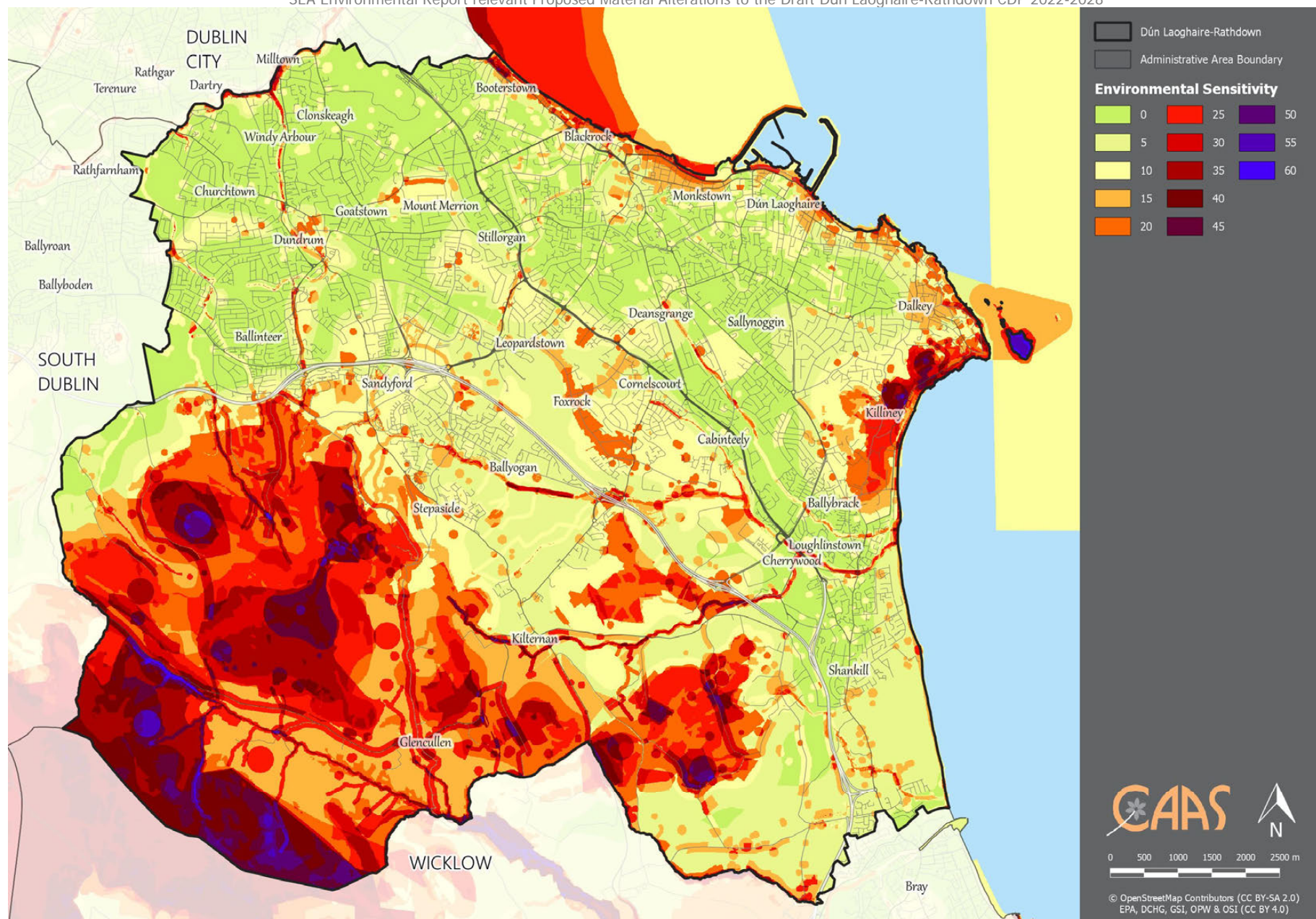


Figure 4.25 Environmental Sensitivities Map

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 Draft Plan, the alternatives and the Proposed Material Alterations 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 Development Plan in the land use planning hierarchy beneath the Eastern and Midland RSES, the measures identified in that RSES 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 5.1 Strategic Environmental Objectives (SEOs), Indicators and Targets

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives	Indicators	Targets
Biodiversity, Flora and Fauna	BFF	No net contribution to biodiversity losses or deterioration	<ul style="list-style-type: none"> 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 the County's natural capital 	<ul style="list-style-type: none"> Condition of European sites 	<ul style="list-style-type: none"> 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
				<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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
				<ul style="list-style-type: none"> SEAs and AAs as relevant for new Council policies, plans, programmes etc. 	<ul style="list-style-type: none"> Screen for and undertake SEA and AA as relevant for new Council policies, plans, programmes etc.
				<ul style="list-style-type: none"> Status of water quality in the County's water bodies 	<ul style="list-style-type: none"> Included under Water below
				<ul style="list-style-type: none"> Compliance of planning permissions with Plan measures providing for the protection of Biodiversity and flora and fauna – see Chapter 8 “Green Infrastructure and Biodiversity” 	<ul style="list-style-type: none"> 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”
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	<ul style="list-style-type: none"> 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 the County's citizens from environment-related pressures and risks to health and well-being 	<ul style="list-style-type: none"> Implementation of Plan measures relating to the promotion of economic growth as provided for by Chapter 6 “Enterprise and Employment Strategy” 	<ul style="list-style-type: none"> 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” 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)
				<ul style="list-style-type: none"> Number of spatial concentrations of health problems arising from environmental factors resulting from development permitted under the Plan 	<ul style="list-style-type: none"> No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan
				<ul style="list-style-type: none"> Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures 	<ul style="list-style-type: none"> Increase in the proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures
				<ul style="list-style-type: none"> Number of spatial plans that include specific green infrastructure mapping 	<ul style="list-style-type: none"> Require all local level land use plans to include specific green infrastructure mapping

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives	Indicators	Targets
Soil (and Land)	S	Ensure the long-term sustainable management of land	<ul style="list-style-type: none"> • 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 within the County • Safeguard areas of prime agricultural land and designated geological sites 	<ul style="list-style-type: none"> • Proportion of population growth occurring on infill and brownfield lands compared to greenfield (also relevant to Material Assets) 	<ul style="list-style-type: none"> • Maintain built surface cover nationally to below the EU average of 4% • 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.
				<ul style="list-style-type: none"> • Instances where contaminated material generated from brownfield and infill must be disposed of 	<ul style="list-style-type: none"> • Dispose of contaminated material in compliance with EPA guidance and waste management requirements
				<ul style="list-style-type: none"> • Environmental assessments and AAs as relevant for applications for brownfield and infill development prior to planning permission 	<ul style="list-style-type: none"> • 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 resource	<ul style="list-style-type: none"> • 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 that economic growth of the marine resource and its ecosystems are managed sustainably • 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 development in areas at risk of flooding and areas that are vulnerable to current and future erosion, particularly coastal areas • Integrate sustainable water management solutions (such as SuDS, porous surfacing and green roofs) into development proposals 	<ul style="list-style-type: none"> • Status of water bodies as reported by the EPA Water Monitoring Programme for the WFD 	<ul style="list-style-type: none"> • 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)
				<ul style="list-style-type: none"> • Number of incompatible developments permitted within flood risk areas 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Programmed delivery of Irish Water infrastructure for all key growth towns in line with Irish Water 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 	<ul style="list-style-type: none"> • 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, Irish Water 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

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives	Indicators	Targets
			<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures 	<ul style="list-style-type: none"> Increase in the proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures
Air	A	Support clean air policies that reduce the impact of air pollution on the environment and public health	<ul style="list-style-type: none"> 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 by 2020 and move closer to WHO recommended levels 	<ul style="list-style-type: none"> Proportion of journeys made by private fossil fuel-based car compared to 2016 National Travel Survey levels of 74% NO_x, SO_x, PM10 and PM2.5 as part of Ambient Air Quality Monitoring 	<ul style="list-style-type: none"> Decrease in proportion of journeys made by private fossil fuel-based car compared to 2016 National Travel Survey levels Improvement in Air Quality trends, particularly in relation to transport related emissions of NO_x and particulate matter
Climatic Factors	C	Achieving transition to a competitive, low carbon, climate-resilient economy that is cognisant of environmental impacts	<ul style="list-style-type: none"> To minimise emissions of greenhouse gasses Integrate sustainable design solutions into the County's 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 	<ul style="list-style-type: none"> 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" 	<ul style="list-style-type: none"> 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"
				<ul style="list-style-type: none"> A competitive, low-carbon, climate-resilient and environmentally sustainable economy 	<ul style="list-style-type: none"> Contribute towards transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050
				<ul style="list-style-type: none"> Share of renewable energy in transport 	<ul style="list-style-type: none"> 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
				<ul style="list-style-type: none"> Carbon dioxide (CO₂) emissions across the electricity generation, built environment and transport sectors 	<ul style="list-style-type: none"> Contribute towards the target of aggregate reduction in carbon dioxide (CO₂) emissions of at least 80% (compared to 1990 levels) by 2050 across the electricity generation, built environment and transport sectors

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives	Indicators	Targets
				<ul style="list-style-type: none"> Energy consumption, the uptake of renewable options and solid fuels for residential heating Proportion of journeys made by private fossil fuel-based car compared to 2016 levels Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures 	<ul style="list-style-type: none"> To promote reduced energy consumption and support the uptake of renewable options and a move away from solid fuels for residential heating Decrease in the proportion of journeys made by residents of the County using private fossil fuel-based car compared to 2016 levels Increase in the proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures
Cultural Heritage	CH	Safeguard cultural heritage features and their settings through responsible design and positioning of development	<ul style="list-style-type: none"> Protect places, features, buildings and landscapes of cultural, archaeological or architectural heritage 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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
				<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> To implement the Plan's framework for identification, assessment, protection, management and planning of landscapes having regard to the European Landscape Convention 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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.

Available Alternatives for the County Development Plan have been identified by Dún Laoghaire-Rathdown County Council under Types 1 to 5 below. These alternatives are assessed in Section 7.

The description of the Plan's alternatives provided below is not significantly affected by the Proposed Material Alterations.

6.2 Limitations in Available Alternatives

The Plan is required to be prepared by 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 limited by the provisions of higher-level planning objectives, including those of the National Planning Framework (NPF) and the Regional Spatial and Economic Strategy (RSES) for the Eastern and Midlands Region. These documents set out various requirements for the content of the Plan including on topics such as land use zoning and the sustainable development of rural areas.

As identified by the Council, there are no significant reasonable alternatives available for the Plan's Core Strategy or population allocations.

6.3 Type 1: Alternatives for an Ecosystem Services Approach to the Plan

Although many natural capital¹⁰⁸ and ecosystem¹⁰⁹ service issues have been taken into account over previous Plan periods, the importance of these in fulfilling environmental obligations has increasingly emerged. 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

- Type 1 - Alternative A: A Plan that takes an Ecosystems Services Approach.
- Type 1 - Alternative B: A Plan that does not take an Ecosystems Services Approach

¹⁰⁸ Renewable and non-renewable resources (e.g. plants, animals, air, water, soils, minerals)

¹⁰⁹ 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

6.4 Type 2: Land Use Zoning

These types of alternatives consider the land use zoning of social, educational, health, religious, recreational and leisure, cultural and civic infrastructure (collectively referred to as neighbourhood infrastructure) to serve the local and wider community.

- Type 2 - Alternative A: Zone neighbourhood infrastructure as it currently is, along with residential uses, with Land Use Zoning Objective A ("To protect and/or improve residential amenity").
- Type 2 - Alternative B: Zone neighbourhood infrastructure with Land Use Zoning Objective SNI "To protect, improve and encourage the provision of sustainable neighbourhood infrastructure".

6.5 Type 3: Alternatives for Additional Accommodation in Existing Built-up Areas

The "O/O Zone" in the 2016 Plan has an objective for "No increase in the number of buildings permissible". This objective covers sensitive areas of Killiney and Dalkey proximate to the coast and much of this area is located close to the DART line, where higher densities would otherwise be permissible. The Office of the Planning Regulator requested for the "O/O Zone" contained in the existing 2016 Plan not to be included in the new Plan.

Three alternatives were considered under this type as follow:

- Type 3 - Alternative A: Include "O/O Zone"
- Type 3 - Alternative B: Do not include "O/O Zone"
- Type 3 - Alternative C: Include "O/O Zone" but reduce extent in comparison to the 2016 Plan's coverage

6.6 Type 4: Densities

Alternatives identified relating to densities comprise:

- Type 4 - Alternative A: Application of a single standard density across the whole County in order to calculate the potential residential yield relating to land zoned for residential purposes for the Core Strategy.
- Type 4 - Alternative B: Application of different densities at different locations, as appropriate; higher densities where sustainable transport mode opportunities are available and lower densities where constraints are presented by, for example, cultural heritage designations or the local road network.

6.7 Type 5: Strategic Land Reserve for Old Connaught

In light of the population allocation approved by the Eastern Midland Regional Assembly to enable the planned growth of the Key Town of Bray to 2031 (falling outside the timeframe of the 2022-2028 Plan), and the regional designation of Old Connaught as a strategic residential development area to facilitate the westward expansion of Bray, it is considered appropriate to identify a Strategic Land Reserve (SLR) to meet this designated future growth. The SLR does not comprise a residential zoning status or any future zoning status however it does protect an area from ad hoc and inappropriate development and provide a framework for potential future growth beyond the timeframe of the Plan period of 2028.

Alternatives identified relating to the SLR, as identified and considered in the Draft Background Paper for the SLR for Old Connaught, comprise:

- Type 5 - SLR 1 Alternative A: Old Connaught North (see Figure 6.1)
- Type 5 - SLR 2 Alternative B: Old Connaught North West (see Figure 6.2)
- Type 5 - SLR 3 Alternative C: Old Connaught South West (see Figure 6.2)

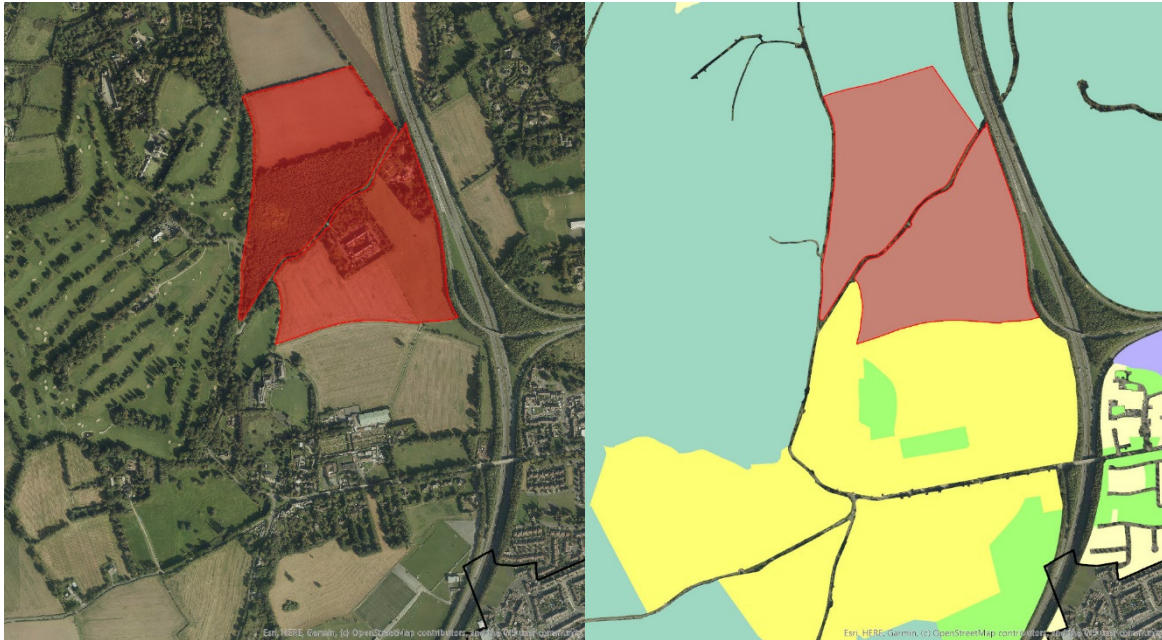


Figure 6.1 Type 5, Alternative A: SLR 1 Old Connaught North

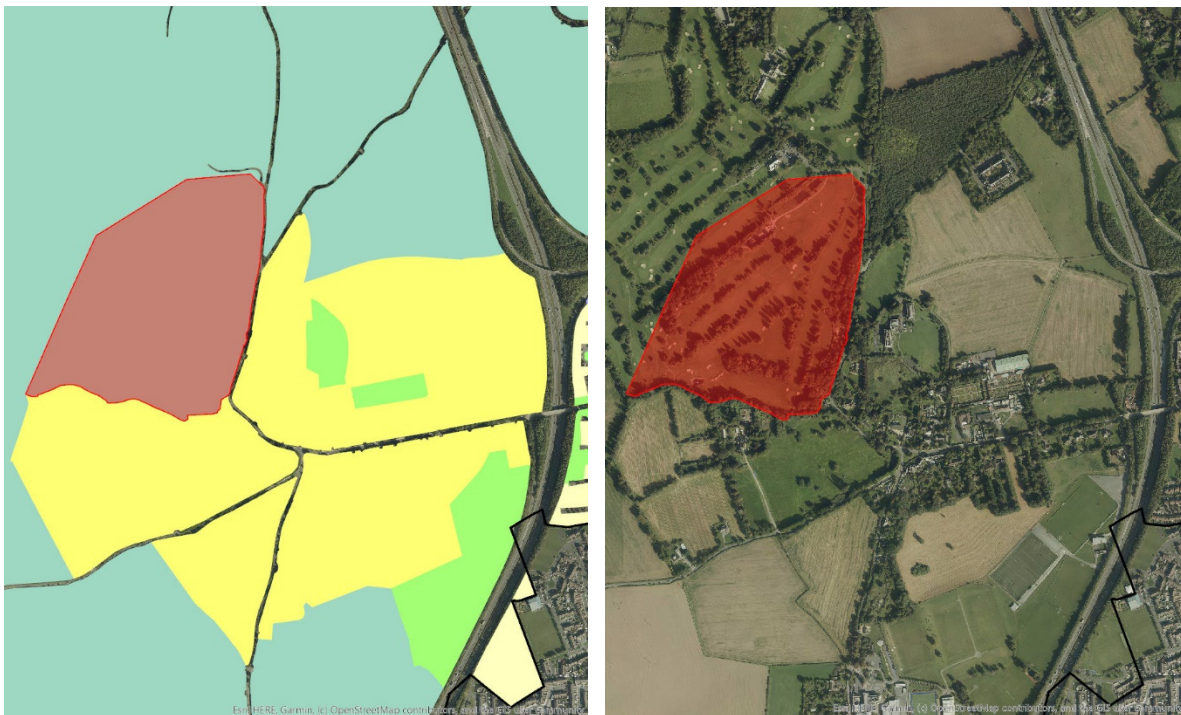


Figure 6.2 Type 5, Alternative B: SLR 2 Old Connaught North West



Figure 6.3 Type 5, Alternative C: SLR 3 Old Connaught South West

Section 7 Evaluation of Alternatives

7.1 Introduction

This section provides a comparative evaluation of the likely significant environmental effects¹¹⁰ 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.

The assessment of the Plan's alternatives provided below is not significantly affected by the Proposed Material Alterations.

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 degree to which effects can be determined is limited as implementation of the Plan will involve assessment, consideration and decision-making associated with lower tier plans and individual projects. Nonetheless a comparative evaluation of the various alternatives can be provided.

Table 7.1 Strategic Environmental Objectives¹¹¹

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives
Biodiversity, Flora and Fauna	BFF	No net contribution to biodiversity losses or deterioration	<ul style="list-style-type: none"> 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 the County's 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	<ul style="list-style-type: none"> 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 the County's citizens from environment-related pressures and risks to health and well-being
Soil (and Land)	S	Ensure the long-term sustainable management of land	<ul style="list-style-type: none"> 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 within the County Safeguard areas of prime agricultural land and designated geological sites
Water	W	Protection, improvement and sustainable management of the water resource	<ul style="list-style-type: none"> 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 that economic growth of the marine resource and its ecosystems are managed sustainably 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 development in areas at risk of flooding and areas that are vulnerable to current and future erosion, particularly coastal areas Integrate sustainable water management solutions (such as SuDS, porous surfacing and green roofs) into development proposals

¹¹⁰ These effects include secondary, cumulative (see also Section 8.2), synergistic, short, medium and long-term permanent and temporary, positive and negative effects.

¹¹¹ See also Section 5

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives
Material Assets	MA	Sustainable and efficient use of natural resources	<ul style="list-style-type: none"> • Optimise existing infrastructure and provide new infrastructure to match population distribution proposals in the County • 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	<ul style="list-style-type: none"> • 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 by 2020 and move closer to WHO recommended levels
Climatic Factors	C	Achieving transition to a competitive, low carbon, climate-resilient economy that is cognisant of environmental impacts	<ul style="list-style-type: none"> • To minimise emissions of greenhouse gasses • Integrate sustainable design solutions into the County's 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	CH	Safeguard cultural heritage features and their settings through responsible design and positioning of development	<ul style="list-style-type: none"> • Protect places, features, buildings and landscapes of cultural, archaeological or architectural heritage
Landscape	L	Protect and enhance the landscape character	<ul style="list-style-type: none"> • To implement the Plan's framework for identification, assessment, protection, management and planning of landscapes having regard to the European Landscape Convention

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 local level – sustainable development and compact growth in Dún Laoghaire-Rathdown. 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 7.2 Effects Common to All Alternatives

Environmental Component	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated
Biodiversity and Flora and Fauna	<ul style="list-style-type: none"> • 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-served lands elsewhere in the County and beyond. • Sustains existing sustainable rural management practices – and the communities who support them – to ensure the continuation of long-established managed landscapes and the flora and fauna that they contain. 	<p>Arising from both construction and operation of development and associated infrastructure:</p> <ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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-served 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-served lands elsewhere in the County and beyond. 	<ul style="list-style-type: none"> • Potential adverse effects arising from flood events. • Potential interactions if effects arising from environmental vectors.
Soil	<ul style="list-style-type: none"> • Contribution towards the protection of soils (including those used for agriculture) and designated sites of geological heritage 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-served lands elsewhere in the County and beyond. 	<ul style="list-style-type: none"> • Potential adverse effects on the hydrogeological and ecological function of the soil resource, including as a result of development on contaminated lands. • Potential for riverbank and coastal erosion.

Environmental Component	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated
Water	<ul style="list-style-type: none"> Contribution towards the protection of water 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-served lands elsewhere in the County and beyond. 	<ul style="list-style-type: none"> 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.
Material Assets	<ul style="list-style-type: none"> 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-served lands elsewhere in the County and beyond. Contribution towards limits in increases in energy demand from the transport sector by facilitating sustainable compact growth. 	<ul style="list-style-type: none"> 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 interactions at local level between agricultural waste and soil, water, biodiversity and human health – including nitrogen deposition as a result of agricultural activities. However, this is likely to be a less significant issue at County level due to low levels of intensive agriculture.
Air and Climatic Factors	<ul style="list-style-type: none"> 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-served lands elsewhere in the County and beyond. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Contributes towards protection of cultural heritage elsewhere in the County by facilitating development within and adjacent to the County's existing built-up footprint. 	<ul style="list-style-type: none"> Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities.
Landscape	<ul style="list-style-type: none"> Contributes towards protection of wider landscape and landscape designations by facilitating development within and adjacent to the County's existing built-up footprint. 	<ul style="list-style-type: none"> Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape.

7.3.2 Type 1: Alternatives for an Ecosystem¹¹² Services Approach to the Plan

Alternative A: “A Plan that takes an Ecosystems Services Approach” 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 capital¹¹³ 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.

Alternative B: “A Plan that does not take an Ecosystems Services Approach” 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 Type 1 Alternative for the Plan:

Alternative A, subject to review of the existing Green Infrastructure Strategy into which the Ecological Network which will be integrated and which will align with the DLR County Biodiversity Action Plan (see Draft Plan Policy Objectives GIB1 and GIB23).

Type 1 alternatives are assessed against Strategic Environmental Objectives on Table 7.3.

¹¹² 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 well-being

¹¹³ Renewable and non-renewable resources (e.g. plants, animals, air, water, soils, minerals)

Table 7.3 Assessment¹¹⁴ of Type 1 Alternatives against Strategic Environmental Objectives

Alternative (selected alternative in bold)	Likely to Improve status of SEOs			Potential Conflict with status of SEOs – likely to be mitigated		
	to a Greater degree	to a Moderate degree	to a Lesser degree	to a Lesser degree	to a Moderate degree	to a Greater degree
(A) A Plan that takes an Ecosystems Services Approach	BFF PHH S W MA A C CH L			BFF PHH S W MA A C CH L		
(B) A Plan that does not take an Ecosystems Services Approach			BFF PHH S W MA A C CH L			BFF PHH S W MA A C CH L

7.3.3 Type 2: Land Use Zoning

Alternative A: Zoning neighbourhood infrastructure¹¹⁵ as it currently is, along with residential uses, with Land Use Zoning Objective A (“To protect and/or improve residential amenity”) would place the lands that provide this essential infrastructure at risk from coming under pressure for residential development. Such pressure could result in existing facilities / uses on site being lost or significantly downgraded to a degree that they would not adequately serve the expanding adjoining residential communities.

Because of this, opportunities would be lost for retaining community and other facilities within close proximity of the communities they serve and the result would be more unsustainable forms of development with increased travel times and a resultant need to travel by private car with associated transport generated emissions.

Alternative A would make living and working within and adjacent to the existing built-up footprint less desirable. As areas within and adjacent to the existing built-up footprint are generally more robust from an environmental perspective, better serviced and better connected, this alternative would hinder the County to sustainably accommodate new residents and maintain and improve services to existing and future communities in accordance with the NPF and RSES.

¹¹⁴ The alternatives are evaluated using compatibility criteria 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 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:

1. Interactions that would be likely to improve the status of a particular SEO would be likely to result in a significant positive effect on the protection/management of the environmental component/issues to which the SEO relates.
2. Interactions that would potentially conflict with the status of an SEO and would be likely to be mitigated would be likely to result in a potential significant negative effect however these effects would be likely to be mitigated by measures which have been integrated into the Plan.

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

¹¹⁵ Including social, educational, health, religious, recreational and leisure, cultural and civic infrastructure.

Alternative B: Zoning neighbourhood infrastructure with Land Use Zoning Objective SNI “To protect, improve and encourage the provision of sustainable neighbourhood infrastructure” would:

- Improve accessibility / permeability between new and existing residential communities and neighbourhood infrastructure, reducing travel times and the need to travel by private car with associated transport generated emissions; and
- Ensure that the existing and future, local and wider, communities are better served by this infrastructure in accordance with the NPF and RSES.

As a result, this alternative would make living and working within and adjacent to the existing built-up footprint more desirable – these areas are generally more robust from an environmental perspective, better serviced and better connected. In this way, this alternative would contribute towards environmental protection and sustainable development, enabling the County to sustainably accommodate new residents and maintain and improve services to existing and future communities.

Selected Type 2 Alternative for the Plan:

Alternative B: Zone neighbourhood infrastructure with Land Use Zoning Objective SNI “To protect, improve and encourage the provision of sustainable neighbourhood infrastructure”.

Type 2 alternatives are assessed against Strategic Environmental Objectives on Table 7.4.

Table 7.4 Assessment of Type 2 Alternatives against Strategic Environmental Objectives

Alternative (selected alternative in bold)	Likely to Improve status of SEOs			Potential Conflict with status of SEOs – likely to be mitigated		
	to a Greater degree	to a Moderate degree	to a Lesser degree	to a Lesser degree	to a Moderate degree	to a Greater degree
(A) Zone neighbourhood infrastructure as it currently is, along with residential uses, with Land Use Zoning Objective A			BFF PHH S W MA A C CH L			BFF PHH S W MA A C CH L
(B) Zone neighbourhood infrastructure with Land Use Zoning Objective SNI	BFF PHH S W MA A C CH L			BFF PHH S W MA A C CH L		

7.3.4 Type 3: Alternatives for Additional Accommodation in Existing Built-up Areas

By applying the “0/0 Zone” (which has an objective for “No increase in the number of buildings permissible”) over the widest area, **Alternative A** would provide the greatest amount of protection of areas which are often sensitive from an amenity (including that contributed towards by architectural structures/areas, archaeological monuments/zones and views, which are already protected under other Plan objectives) and ecological perspective (including the protected Dalkey Coastal Zone and Killiney Hill pNHA).

However, this application of the “0/0 Zone” in locations close to public transport, where government policy supports higher densities, would not contribute towards objectives for sustainable mobility, minimising greenhouse gas emissions from transport, efficiently using land, compact growth and optimising the use of existing infrastructure. Development that could be sustainably accommodated in the area covered by the “0/0 Zone” under Alternative A would have the potential to be pushed out towards areas that are less well-serviced and less well-connected, resulting in unnecessary potentially significant adverse effects on all environmental components.

By not including the “0/0 Zone”, **Alternative B** would provide the least amount of protection of areas which are often sensitive from an amenity (including that contributed towards by architectural structures/areas, archaeological monuments/zones and views, which are already protected under other Plan objectives) and ecological perspective (including the protected Dalkey Coastal Zone and Killiney Hill pNHA).

The removal of the “0/0 Zone” in locations close to public transport, where government policy supports higher densities, would contribute towards objectives for sustainable mobility, minimising greenhouse gas emissions from transport, efficiently using land, compact growth and optimising the use of existing infrastructure. Development that could be sustainably accommodated in the area currently covered by the “0/0 Zone” under the existing 2016 Plan would not be pushed out towards areas that are less well-serviced and less well-connected, avoiding unnecessary potentially significant adverse effects on all environmental components.

Alternative C involves including the “0/0 Zone” but reducing its extent in comparison to the 2016 Plan’s coverage, a mixture of Alternative A and B that takes into account traffic, visual and ecological designation issues and provides the “0/0 Zone” in some locations but not in others. The new objective for these areas would allow for sensitive infill in locations which are within 10 minutes’ walk of a DART station and which would not detract from the unique character of the area visually or by traffic generation which would necessitate changes to the road network.

Selected Type 3 Alternative for the Plan:

Alternative C: Include “0/0 Zone” but reduce extent in comparison to the 2016 Plan’s coverage.

Type 3 alternatives are assessed against Strategic Environmental Objectives on Table 7.5.

Table 7.5 Assessment of Type 3 Alternatives against Strategic Environmental Objectives

Alternative (selected alternative in bold)	Likely to improve status of SEOs			Potential Conflict with status of SEOs – likely to be mitigated		
	to a Greater degree	to a Moderate degree	to a Lesser degree	to a Lesser degree	to a Moderate degree	to a Greater degree
(A) A: Include "O/O Zone"	S BFF W PHH L CH ▪		A C S BFF W PHH MA L CH ■	S BFF W PHH L CH ▪		A C S BFF W PHH MA L CH ■
(B) Do not include "O/O Zone"	A C S BFF W PHH MA L CH ■		S BFF W PHH L CH ▪	A C S BFF W PHH MA L CH ■		S BFF W PHH L CH ▪
(C) Include "O/O Zone" but reduce extent in comparison to the 2016 Plan's coverage		S BFF W PHH L CH ▪ A C S BFF W PHH MA L CH ■			S BFF W PHH L CH ▪ A C S BFF W PHH MA L CH ■	

▪ = as a result of limited development within the O/O Zone

■ = as a result of development that would occur/would have otherwise occurred outside of the O/O Zone

7.3.5 Type 4: Densities

Alternatives identified relating to densities comprise:

Alternative A: The Application of a single standard density across the whole County in order to calculate the potential residential yield relating to land zoned for residential purposes for the Core Strategy could lead to the potential over or undersupply of land for primarily residential purposes.

The application of a singular low net residential density across the County could fundamentally undermine both national and regional strategic outcomes including 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 County that are less well-served 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.

Alternative B: The Application of different densities at different locations, as appropriate, 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 national and regional strategic outcomes including the efficient use of land, compact growth and the transition towards a low carbon and more climate resilient society.

Alternative B 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 B.

Selected Type 4 Alternative for the Plan:

Alternative B: Application of different densities at different locations, as appropriate.

Type 4 alternatives are assessed against Strategic Environmental Objectives on Table 7.6.

Table 7.6 Assessment of Type 4 Alternatives against Strategic Environmental Objectives

Alternative (selected alternative in bold)	Likely to Improve status of SEOs			Potential Conflict with status of SEOs – likely to be mitigated		
	to a Greater degree	to a Moderate degree	to a Lesser degree	to a Lesser degree	to a Moderate degree	to a Greater degree
(A) Application of a single standard density across the whole County			BFF PHH S W MA A C CH L			BFF PHH S W MA A C CH L
(B) Application of different densities at different locations, as appropriate	BFF PHH S W MA A C CH L			BFF PHH S W MA A C CH L		

7.3.6 Type 5: Strategic Land Reserve for Old Connaught

Further to being required by the Eastern and Midland RSES, the future development of Old Connaught as part of the planned growth of Bray, will benefit sustainable development and environmental protection and management as the Old Connaught will be better serviced and better connected than other lands surrounding the town. Alternative sites for the Strategic Land Reserve (SLR) at Old Connaught are considered in detail in the Draft Background Paper for the SLR for Old Connaught.

Alternative A: SLR 1 Old Connaught North

The SLR 1 lands are considered to be strategically located to benefit from planned strategic infrastructure upgrades in the area. The location of the lands immediately adjacent to and within walking distance of planned high frequency transport including the Green Line Luas extension, a Core Bus Corridor and the DART, would support the potential of the lands to comprise a sustainable urban extension of the Old Connaught area with access, through sustainable means, to strategic employment locations, local services and amenities. Constraints relating to the SLR 1 lands include the loss of existing agricultural and forestry land, impacts on identified protected views, proximity to a protected structure and potential noise pollution associated with the M11. While the lands would comprise 'greenfield' expansion of the built-up area as opposed to brownfield/infill compact growth it is considered that, subject to planned infrastructure upgrades, the SLR 1 lands would comprise a sustainable extension to the Old Connaught area.

Alternative B: SLR 2 Old Connaught North West

The SLR 2 lands are considered to be well located to benefit from planned strategic infrastructure upgrades in the area. The location of the lands in proximity to the planned Green Line Luas extension would support the potential of the lands to comprise a sustainable urban extension of the Old Connaught area with access, through sustainable means, to strategic employment locations, local services and amenities. Constraints relating to the SLR 2 lands include the loss of an active sporting facility serving the local and wider community and impacts on identified protected views. While the lands would not be considered to comprise compact growth it is considered that, in the context of planned infrastructure upgrades, the SLR 2 lands could, in part, comprise a sustainable extension to the Old Connaught area.

Alternative C: SLR 3 Old Connaught South West

The SLR 3 lands are considered to be well located to benefit from planned strategic infrastructure upgrades in the area. The lands do however have a number of constraints including: the comparative distance of part of the lands from planned high frequency transport and resultant connectivity to requisite amenities, services and employment locations; loss of existing agricultural lands; proximity to the Ballyman Glen, a Special Area of Conservation; impact on views identified for preservation; existing utility infrastructure locating at the lands; and, archaeology.

Selected Type 5 Alternative for the Plan:

Having appraised each of the potential sites and undertaken a comparative analysis, SLR 1 (Alternative A) emerges as the most preferable on a number of fronts, and in particular those criteria identified in the NPF and RSES, and it is therefore recommended that SLR 1 is advanced as a potential strategic land reserve for inclusion in the Plan. The rationale for this recommendation is as follows:

- The SLR 1 lands are located immediately contiguous to the north of the existing 'A1' zoned Old Connaught LAP lands. It is considered that the extension of Old Connaught at this location would be consistent with the RSES designation of Old Connaught as a strategic development area and would support the westward expansion of Bray.
- The 'GB' zoning of the lands. NPO 62 of the NPF acknowledges the role of green belts for the long-term strategic expansion of urban areas.
- The lands would be strategically located within walking distance of both existing and planned services and amenities at both Shankill and Old Connaught. In the context of current planned infrastructure upgrades, the lands are considered to comprise the sequentially preferable lands for the future growth of Old Connaught.
- The SLR 1 lands are strategically located at a comparatively lower elevation to avail of and support the planned strategic water infrastructure upgrades.
- It is considered that the SLR 1 lands would be strategically located to avail of and support the planned strategic road upgrades set out in the NTA's Bray and Environs Transport Study, including in particular the upgrade of the Ferndale Road and the new link road between Ferndale Road and Dublin Road.
- The lands are considered to meet the criteria set out under NPO 68 that relocated growth would be served by high capacity public transport and the RSES requirement that growth would take place on high capacity planned or existing public transport corridors. Subject to the delivery of planned infrastructure upgrades the lands would be strategically located within walking distance to public transport services including, but not limited to:
 - The Luas Green Line extension.
 - BusConnects Core Bus Corridor route number 13.
 - The planned DART Station at Woodbrook.

In light of the above it is considered that the lands would comprise a 'sustainable urban extension' in accordance with NPO 68 of the NPF.

It is acknowledged that there are constraints relating to the SLR 1 lands including: the loss of existing agricultural and forestry land; impacts on identified protected views; proximity to a protected structure; and potential noise pollution associated with the M11. Notwithstanding, it is considered that the

strategic considerations highlighted above significantly outweigh these identified constraints, many of which may be mitigated against and associated impacts greatly reduced.

Type 5 alternatives are assessed against Strategic Environmental Objectives on Table 7.6.

Table 7.7 Assessment of Type 4 Alternatives against Strategic Environmental Objectives

Alternative (selected alternative in bold)	Likely to Improve status of SEOs			Potential Conflict with status of SEOs – likely to be mitigated		
	to a Greater degree	to a Moderate degree	to a Lesser degree	to a Lesser degree	to a Moderate degree	to a Greater degree
(A) SLR 1 Old Connaught North	MA A C	BFF CH S W PHH	L	MA A C	BFF CH S W PHH	L
(B) SLR 2 Old Connaught North West	CH PHH	BFF MA S A C W	L	CH PHH	BFF MA S W A C	L
(C) SLR 3 Alternative C: Old Connaught South West	PHH	CH S	BFF W L A C MA	PHH	CH MA S	BFF W L A C MA

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 and Proposed Material Alterations.

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 Objectives¹¹⁶

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives
Biodiversity, Flora and Fauna	BFF	No net contribution to biodiversity losses or deterioration	<ul style="list-style-type: none"> 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 the County's 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	<ul style="list-style-type: none"> 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 the County's citizens from environment-related pressures and risks to health and well-being
Soil (and Land)	S	Ensure the long-term sustainable management of land	<ul style="list-style-type: none"> 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 within the County Safeguard areas of prime agricultural land and designated geological sites
Water	W	Protection, improvement and sustainable management of the water resource	<ul style="list-style-type: none"> 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 that economic growth of the marine resource and its ecosystems are managed sustainably 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 development in areas at risk of flooding and areas that are vulnerable to current and future erosion, particularly coastal areas Integrate sustainable water management solutions (such as SuDS, porous surfacing and green roofs) into development proposals
Material Assets	MA	Sustainable and efficient use of natural resources	<ul style="list-style-type: none"> Optimise existing infrastructure and provide new infrastructure to match population distribution proposals in the County 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

¹¹⁶ See also Section 5

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives
Air	A	Support clean air policies that reduce the impact of air pollution on the environment and public health	<ul style="list-style-type: none"> 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 by 2020 and move closer to WHO recommended levels
Climatic Factors	C	Achieving transition to a competitive, low carbon, climate-resilient economy that is cognisant of environmental impacts	<ul style="list-style-type: none"> To minimise emissions of greenhouse gases Integrate sustainable design solutions into the County's 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	CH	Safeguard cultural heritage features and their settings through responsible design and positioning of development	<ul style="list-style-type: none"> Protect places, features, buildings and landscapes of cultural, archaeological or architectural heritage
Landscape	L	Protect and enhance the landscape character	<ul style="list-style-type: none"> To implement the Plan's framework for identification, assessment, protection, management and planning of landscapes having regard to the European Landscape Convention

8.2 Cumulative Effects

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 8.2 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, to which the Proposed Material Alterations relate, 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 2.6 (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, adjoining County Development Plans for Wicklow, South Dublin and Dublin City, Local Area Plans within the County and adjoining the County, such as the Bray Municipal District Local Area Plan, and Planning Schemes, such as that for Cherrywood);
- Dún Laoghaire-Rathdown Local Economic and Community Plan and the Local Economic and Community Plans of adjoining authorities;
- 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 Policy Position on Climate Action and Low Carbon Development, Low Carbon Development Act 2015 and White Paper Ireland's Transition to a Low Carbon Energy Future 2015, Climate Action Plan 2021, the National Adaptation Framework 2018 and the Dún Laoghaire-Rathdown County Council's Climate Change Action Plan 2019-2024);
- Water services, waste management, transport and energy infrastructure plans (e.g. Transport Strategy for the Greater Dublin Area 2016-2035, Greater Dublin Area Cycle Network Plan, Irish Water's Water Services Strategic Plan and associated Capital Investment Plan and Eastern-Midlands Regional Waste Management Plan); and
- Other environmental protection and management plans (e.g. River Basin Management Plan, emerging Marine Spatial Plan and Flood Risk Management Plan).

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:
 - sustainable compact growth;
 - 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 housing, employment, agricultural and forestry – 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 County border;
- 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 is 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 Dún Laoghaire-Rathdown.

A variety of the issues covered by the Plan provisions are regional issues which are considered: at Regional Assembly level, in the Eastern and Midland RSES and by planning authorities across the Region. The solutions to these issues are often regional solutions which are subject their own consenting procedures. Works arising outside of the Plan as a result of providing for new development within the County including those arising as a result of the cumulative provision of development in the wider Eastern and Midland region would potentially conflict with a number of environmental components, across the 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 Appropriate Assessment and Strategic Flood Risk Assessment

Stage 2 Appropriate Assessment (AA) and Strategic Flood Risk Assessment (SFRA) are being undertaken alongside the preparation of the Draft Plan and the Proposed Material Alterations.

The requirement for AA is provided under the EU Habitats Directive (Directive 1992/43/EEC). The AA assesses the effects of the Plan on European Sites designated for certain habitats and species. The emerging conclusion of the AA is that the Plan and Proposed Material Alterations will not affect the integrity of the Natura 2000 network¹¹⁷. The Proposed Material Alterations are accompanied by an AA Natura Impact Report, which has informed this SEA Environmental Report.

SFRA is being undertaken to inform the preparation of the Draft Plan and the Proposed Material Alterations. The SFRA process has informed this report. SFRA is required by 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (Department of Environment and Office of Public Works, 2009) and associated Circular PL2/2014.

The SFRA has considered the Proposed Material Alterations and finds that all Proposed Material Alterations comply with "The Planning System and Flood Risk Management Guidelines for Planning Authorities" (DEHLG/OPW, 2009)

Various policies and objectives have been integrated into the Plan through the SEA, SFRA and AA processes. The preparation of the Plan, SEA, AA and SFRA has taken place concurrently and the findings of the AA and SFRA have informed both the Plan and the SEA.

8.4 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; neither implementation of the Plan nor the Proposed Material Alternatives, will affect the interrelationships between these components. The presence of significant interrelationships between environmental components is identified on Table 8.2.

¹¹⁷ 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/programme/project to proceed; and

(c) adequate compensatory measures in place.

Table 8.2 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								

8.5 Overall Evaluation of Draft Plan Provisions to which the Proposed Material Alterations Relate (from SEA Environmental Report January 2021)

Dún Laoghaire-Rathdown County Council have integrated various recommendations arising from the SEA, AA and SFRA processes into the Draft 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 through both provisions integrated into the Plan – see Section 9.

Taking into account, *inter alia*, the detailed mitigation which has been integrated into the Plan (including that which is identified at Section 9), it has been determined that significant residual adverse environmental effects will not occur.

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.

Table 8.3 Overall Evaluation – Effects arising from the Draft Plan

Environmental Component	Environmental Effects, in combination with the wider planning framework			SEO Codes
	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, 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	<ul style="list-style-type: none">• 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 long-established managed landscapes and the flora and fauna that they contain.	<p>Arising from both construction and operation of development and associated infrastructure:</p> <ul style="list-style-type: none">• 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.	<ul style="list-style-type: none">• 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

Environmental Component	Environmental Effects, in combination with the wider planning framework			SEO Codes
	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, 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	
Population and Human Health	<ul style="list-style-type: none">• 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-served 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-served 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.	<ul style="list-style-type: none">• Potential adverse effects arising from flood events.• Potential interactions if effects arising from environmental vectors.	<ul style="list-style-type: none">• Potential interactions with residual effects on environmental vectors – please refer to residual adverse effects under “Soil”, “Water” and “Air and Climatic Factors” below.	PHH
Soil	<ul style="list-style-type: none">• Contribution towards the protection of soils (including those used for agriculture) and designated sites of geological heritage 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-served lands elsewhere in the County and beyond.• Contribution towards the protection of the environment from contamination the highest standards of remediation, and where appropriate to consultations with the EPA and other relevant bodies, will be required to resolve any instances of environmental pollution created by contaminated land.	<ul style="list-style-type: none">• Potential adverse effects on the hydrogeological and ecological function of the soil resource, including as a result of development on contaminated lands.• Potential for riverbank and coastal erosion.	<ul style="list-style-type: none">• Loss of an extent of soil function arising from the replacement of semi-natural land covers with artificial surfaces.• Coastal and riverbank erosion will continue to occur naturally over time and is likely to be enhanced by climate change	S

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, 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	
Water	<ul style="list-style-type: none"> Contribution towards the protection of water 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-served 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. 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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-served 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. 	<ul style="list-style-type: none"> 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 interactions at local level between agricultural waste and soil, water, biodiversity and human health – including nitrogen deposition as a result of agricultural activities. However, this is likely to be a less significant issue at County level due to low levels of intensive agriculture. 	<ul style="list-style-type: none"> 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

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, 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	<ul style="list-style-type: none"> 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-served 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: <ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Potential conflict between development under the Plan and aiming to reduce carbon emissions in line with local, national and European environmental objectives. 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Contributes towards protection of cultural heritage elsewhere in the County by facilitating development within and adjacent to the County's existing built-up footprint. Contributes towards protection of cultural heritage within and adjacent to the County's existing built-up footprint by facilitating brownfield development and regeneration. 	<ul style="list-style-type: none"> Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities. 	<ul style="list-style-type: none"> Potential effects on known architectural and archaeological heritage and unknown archaeology however, these will occur in compliance with legislation. 	CH
Landscape	<ul style="list-style-type: none"> Contributes towards protection of wider landscape and landscape designations by facilitating development within and adjacent to the County's existing built-up footprint. 	<ul style="list-style-type: none"> Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape. 	<ul style="list-style-type: none"> 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

8.6 Detailed Evaluation¹¹⁸

For an explanation of SEO codes e.g. **BFF**, **PHH**, **S**, **W**, etc. refer to Table 8.1 on page 89.

The following applies to the evaluation:

The Plan, to which the Proposed Material Alterations relate, 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 Adaptation Framework, the Climate Action Plan, the Transport Strategy for the Greater Dublin Area and the Regional Spatial and Economic Strategy for the Eastern and Midland Region (for additional detail please refer to Section 2.6 “*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.

Alteration Ref. ¹¹⁹	Commentary	Likely to Improve status of SEOs	Additional Potential Conflicts that would need to be mitigated	No Likely interaction with status of SEOs above those already identified for the original Draft Plan
No. 83, 265 and 316	These Proposed Material Alterations add to the Mobility and Transport provisions contained in the Draft Plan and would facilitate increases in levels of walking and cycling thereby reducing car usage and emissions arising from transport. The development provided for by these Proposed Material Alterations would, however, present adverse effects for the status of coastal waters, ecological connectivity, architectural heritage, designated and unknown archaeology, sensitive visual features, ecological connectivity and coastal European sites. The mitigation already contained within the Draft Plan will ensure so that the integrity of these sites are protected. This mitigation is further added to by mitigation integrated into Proposed Material Alterations No. 265 and 316.	BFF PHH S W MA A C L	PHH S W MA A C CH L	
No. 84	This Proposed Material Alteration would further add to the ecological mitigation relating to coastal cycling infrastructure included in the Draft Plan and in other Proposed Material Alterations (No. 265 and 316) by requiring that development proposals are subject to Ecological Impact Assessment in addition to AA, which is already specified in the Draft Plan.	BFF PHH S W L		MA A C CH
No. 208 and No. 306	These measures combined provide a greater focus with regard to compliance with the EPA Code of Practice Domestic Wastewater Treatment Systems and EPA Wastewater Treatment Manuals and the protection of groundwater. The difference arising as a result of the changes could be considered mitigation in relation to the Plan elements that could potentially affect the integrity of European sites under the Plan, further to that already included in the Draft Plan. Therefore it was deemed prudent to undertake Stage 2 AA. Consequently, SEA was advised as prudent. The changes arising from both Alterations combined would benefit the protection and management of various environmental components, in addition to European sites, including water, soil, human health and the adequate provision of water services.	BFF PHH S W MA		L A C CH

¹¹⁸ The Proposed Material Alterations are evaluated using compatibility criteria in order to determine how they would be likely to affect the status of the existing environment and the SEOs. The SEOs and the Proposed Material Alterations 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 result in a positive effect on the protection/management of the environmental component/issues to which the SEO relates.
- Interactions that would potentially conflict with the status of an SEO and would be likely to be mitigated would be likely to result in a potential significant negative effect however these effects would be likely to be mitigated by measures which have been integrated into the Plan.

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

¹¹⁹ For detail on Proposed Material Alterations please refer to Proposed Material Alterations document.

Alteration Ref. ¹¹⁹	Commentary	Likely to Improve status of SEOs	Additional Potential Conflicts that would need to be mitigated	No Likely interaction with status of SEOs above those already identified for the original Draft Plan
No. 218 No. 314	The intention of Proposed Material Alterations No. 218 and 314 is to provide for a number of holiday caravan/camping facilities within a 1km radius of the cross roads at Glencullen. The construction of this type of development and ancillary facilities and infrastructure and the operation of the development, with an increased number of people coming to the area, would have the potential to affect the nearby Knocksink Wood SAC. Furthermore, development would present additional potential conflicts on environmental components including water (groundwater/source protection areas and sensitive watercourses) and amenity, landscape and visual sensitivities. The mitigation already contained within the Draft Plan and the mitigation that has been integrated into Proposed Material Alteration No. 314 will help ensure the mitigation of potential effects arising so that the environment and the integrity of this site is protected.	BFF PHH S W L	PHH S W MA A C CH L	
No. 269	Proposed Material Alteration No. 269 provides for “the development of the publicly owned lands at Bath Place, Blackrock for primarily public uses, in conjunction with the community of Blackrock during the lifetime of this Plan”. Although the Draft Plan already provides for the development of sites such as this one and although the likely significant environmental effects have already been mitigated by requirements including those already integrated into the Draft Plan, this development, in a similar way to other development along the coast, has the potential to impact upon the qualifying features of two European sites (South Dublin Bay SAC and Sandymount Strand/Tolka Estuary SPA). Consequently Stage 2 AA, and therefore full SEA, was required for this Proposed Material Alteration. The mitigation already contained within the Draft Plan will ensure the mitigation of potential effects arising so that the integrity of these sites are protected.		BFF	PHH S W MA A C CH L
No. 356 No. 357	These Alterations would reduce the protection of architectural heritage by removing structures that merits inclusion on the Record of Protected Structures.		CH	BFF PHH S W MA A C L
Map No. 9 Mapping Amendment M911 - to add Strategic Land Reserve at Kiltiernan	<p>This Proposed Material Alteration is to add a Strategic Land Reserve at Kiltiernan. One of the Proposed Material Alterations to the Draft Plan Maps is to add a Strategic Land Reserve at Kiltiernan. Development of these lands would have the potential to impact upon the Knocksink Wood SAC (situated 3.5km to the south of the subject lands), as a result of impacts on groundwater. The site is within the same Groundwater Body as the SAC, reference IE_EA_G_076, and the SAC is designated for, inter alia, petrifying springs with tufa formation. These qualifying interests are sensitive to changes in groundwater quality and quantity and there is uncertainty regarding the hydrogeological pathways from the subject lands. The mitigation already contained within the Draft Plan and the mitigation that has been integrated into Proposed Material Alteration No. 208 would help to ensure the mitigation of potential effects arising, if development were to occur here, so that the integrity of this site is protected.</p> <p>Development of these lands would not be consistent with the proper planning or sustainable development of the County and would not be evidence based. Development would present additional, currently unnecessary and potentially significant adverse effects on various environmental components, including soil, water, landscape, protected trees and woodland, non-designated habitats and species, protected structures, sustainable mobility and climate emission reduction targets. Development of these lands would provide for a less compact form of development that would fail to maximise benefits from infrastructural investment, facilitating the unnecessary sprawl of development in this area and failing to consolidate zoning.</p> <p>These potential conflicts will be mitigated by the inherent status of the Strategic Land Reserve designation, which generally restricts development during this Plan period.</p>		BFF PHH S W MA A C CH L	

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. These measures also apply to Proposed Material Alterations.

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 the:

- Strategic work undertaken by the Council to ensure contribution towards environmental protection and sustainable development;
- Considering alternatives for the Plan, to which the Proposed Material Alterations relate;
- Integration of environmental considerations into zoning provisions of the Plan, to which the Proposed Material Alterations relate; and
- Integration of individual SEA, AA and SFRA provisions into the text of the Plan, to which the Proposed Material Alterations relate.

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

Far in advance of both the submission of the Chief Executive's Draft Plan to the Elected Members for approval and the placing of the Draft Plan on public display, Dún Laoghaire-Rathdown County Council undertook various background work in order to inform the preparation of 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 within the County.

Strategic work undertaken by the Council includes background work in relation to Plan Strategies and other provisions for a variety of sectors, including:

- Climate Action;
- Transport and Mobility;
- Green Infrastructure;
- Infrastructure Assessment;
- Housing Strategy and Interim Housing Needs Demand Assessment;
- Building Height Strategy;
- Waste Management Guidelines;
- Green Roofs;
- Stormwater Management Policy
- Interim to Dun Laoghaire Urban Framework Plan;
- Background Paper for the SLR for Old Connaught;
- Landscape Character Areas;
- Wind Energy Strategy;
- Dún Laoghaire Urban Framework Plan;
- Sandyford Urban Framework; and
- Record of Protected Structures.

The undertaking of the SEA process for the Draft Plan, to which the Proposed Material Alterations relate, and associated Appropriate Assessment and Strategic Flood Risk Assessment processes were part of this strategic work and contributed towards the integration of environmental considerations into individual Plan provisions as detailed under Section 9.4.

9.3 Consideration of Alternatives

Although strategic alternatives in relation to the content of the Plan were significantly limited for the Plan (see Section 6), as part of the Plan preparation/SEA process, the Council considered a number of alternatives for the Draft Plan, to which the Proposed Material Alterations relate.

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 and placed on public display.

9.4 Integration of environmental considerations into Zoning of the Plan

Environmental considerations were integrated into the Plan's zoning through an interdisciplinary approach.

Zoning has been applied in a way that primarily seeks to achieve sustainable and compact growth, taking into account the various requirements set out in the higher-level NPF and Eastern and Midland RSES.

The detailed Plan preparation process undertaken by the Planning Department combined with specialist input from the SFRA process sought to facilitate zoning that avoids inappropriate development being permitted in areas of high flood risk. Various provisions have been inserted into the Plan that provide for flood risk management at project level. Also taken into account were environmental sensitivities relating to ecology, cultural heritage, landscape and water.

9.5 Integration of individual SEA, AA and SFRA 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. These measures also apply to Proposed Material Alterations.

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. Some of these measures, many of which were integrated into the current 2016-2022 Plan through the SEA and associated AA and SFRA processes for that Plan, have been retained and/or updated.

Some of the key text integrated into the Plan as a direct result of SEA and AA recommendations for the Draft Plan 2022-2028 are detailed on Table 9.2.

Table 9.1 Integration of Environmental Considerations into the Plan

Topic	Potentially Significant Adverse Effect, if Unmitigated	Recommendations integrated into the Draft Plan, included in: (this text will be updated at adoption of the Plan to take account of any Alterations/Modifications made)
Various	Various	Policy Objective T24: Environmental Assessment of New Roads It is a Policy Objective that where projects for new roads, identified under Section 5.7, are not already provided 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 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 and Stage 2 – Route Identification, Evaluation and Selection.
Various	Various	Special Local Objective 107 To co-operate with the National Transport Authority, Transport Infrastructure Ireland and Wicklow County Council in the establishment of a combined road across the County Brook Valley to provide connections between the proposed new development areas of Old Connaught and Fassaroe (Wicklow County). The Corridor and Route Selection Process outlined by Policy T24 should be followed
Various	Various	Green Infrastructure Policy Objective GIB1: 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.
Various	Various	Policy Objective OSR7: 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.
Various	Various	Policy Objective OSR8: Greenways and Blueways Network: It is a Policy Objective to develop a comprehensive network of County Greenways linking parks and public open spaces and to liaise with adjoining local authorities and other stakeholders to achieve and improve wider external linkages and corridors, to enable enhanced connectivity to wider strategic networks, and to allow for the long-term strategic expansion of urban areas (consistent with NPO 62 of the NPF).
Various	Various	Requirements under Chapter 12: Development Management, including those under the headings of: Impacts on the Environment <ul style="list-style-type: none"> • Environmental Impact Assessment • Appropriate Assessment • Ecological Impact Assessment Environmental Infrastructure <ul style="list-style-type: none"> • Air Pollution • Noise Pollution • Noise, Odour and Vibration Generating Uses • Construction Management Plans • Hours of Construction • New Development/Change of Use - Environmental Impacts • Waste Management Infrastructure facilities and refuse transfer stations • Telecommunications • Development and Overhead Power Lines • Public lighting • Drainage and Water Supply • Flood Risk Management • Coastal Issues - Erosion/Flooding/ Recreation
Biodiversity and flora and fauna	Arising from both construction and operation of development and associated infrastructure: <ul style="list-style-type: none"> • 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- 	Policy Objective CS8 – Ecosystem Services Approach: It is a Policy Objective to promote an Ecosystem Services Approach in the preparation of lower-level Plans, Strategies and Development Management. Policy Objective T29: 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. Policy Objective GIB7: National Marine Planning Framework (NMPF) It is a Policy Objective to support the policies and objectives as appropriate and relevant of the forthcoming National Marine Planning Framework (NMPF), with respect to the conservation, management, and protection for a sustainable future for the marine area. Policy Objective GIB10: Dublin Bay Biosphere It is a Policy Objective to participate, support and contribute to the management of the biosphere, along with its partners and to aim to raise awareness and education to people living, working and using the biosphere, through an Education Strategy. In furtherance of this Policy Objective DLR have contributed to the development of an Environmental Code of Practice for those working in the Biosphere and all partners carry out conservation actions including gathering biodiversity data and monitoring within the biosphere.

Topic	Potentially Significant Adverse Effect, if Unmitigated	Recommendations integrated into the Draft Plan, included in: (this text will be updated at adoption of the Plan to take account of any Alterations/Modifications made)
	<p>designated habitats; and disturbance to biodiversity and flora and fauna;</p> <ul style="list-style-type: none"> 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. 	<p>Policy Objective GIB11: Coastal Area Feasibility Study It is a Policy Objective to explore undertaking a comprehensive feasibility study on the recreational potential along the coastal area of the County which comprehensively addresses recreational impact - including visitor numbers, mapping and surveying of sensitive habitats and species and identification of significant threats on European sites - and which would allow an assessment of any future proposals, alone or in combination, to assess impact on the coastal and marine zone within and adjacent to the County boundary. The Council will explore the possibility of carrying out this study with adjoining and/or coastal Local Authorities and/or other agencies.</p> <p>Policy Objective GIB18: Protection of Natural Heritage and the Environment It is a Policy Objective to protect and conserve the environment including, in particular, the natural heritage of the County and to conserve and manage Nationally and Internationally important and EU designated sites - such as Special Protection Areas (SPAs), Special Areas of Conservations (SACs), proposed Natural Heritage Areas (pNHAs) and Ramsar sites (wetlands) - as well as non-designated areas of high nature conservation value known as locally important areas which also serve as 'Stepping Stones' for the purposes of Article 10 of the Habitats Directive.</p> <p>Policy Objective GIB19: Habitats Directive It is a Policy Objective to ensure the protection of natural heritage and biodiversity, including European sites that form part of the Natura 2000 network, in accordance with relevant EU Environmental Directives and applicable National Legislation, Policies, Plans and Guidelines.</p> <p>Policy Objective GIB20: Biodiversity Plan It is a Policy Objective to support the provisions of the forthcoming DLR County Biodiversity Action Plan, 2021 – 2026.</p> <p>Policy Objective GIB21: Designated Sites It is a Policy Objective to protect and preserve areas designated as proposed Natural Heritage Areas, Special Areas of Conservation, and Special Protection Areas. It is Council policy to promote the maintenance and as appropriate, delivery of 'favourable' conservation status of habitats and species within these areas.</p> <p>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 Designated Areas and to ensure that notable sites, habitats and features of biodiversity importance - including species protected under the Wildlife Acts 1976 and 2000, the Birds Directive 1979, the Habitats Directive 1992, Flora (Protection) Order, 2015, Annex I habitats, local important areas, wildlife corridors and rare species - are adequately protected. Ecological assessments will be carried out for all developments in areas that support, or have potential to support, features of biodiversity importance or rare and protected species and appropriate mitigation/ avoidance measures will be implemented. In implementing this policy regard shall be had to the Ecological Network including the forthcoming DLR Wildlife Corridor Plan and the recommendations and objectives of the Green City Guidelines (2008) and 'Ecological Guidance Notes for Local Authorities and Developers' (Dún Laoghaire- Rathdown Version 2014).</p> <p>Policy Objective GIB23: County-Wide Ecological Network It is a Policy Objective to protect the Ecological Network which will be integrated into the updated Green Infrastructure Strategy and will align with the DLR County Biodiversity Action Plan. Creating this network throughout the County will also improve the ecological coherence of the Natura 2000 network in accordance with Article 10 of the Habitats Directive. The network will also include non-designated sites.</p> <p>Policy Objective GIB24: Rivers and Waterways It is a Policy Objective to maintain and protect the natural character and ecological value of the river and stream corridors in the County and where possible to enhance existing channels and to encourage diversity of habitat and nature-based solutions that 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.</p> <p>Policy Objective GIB25: Hedgerows It is a Policy Objective to retain and protect hedgerows in the County from development, which would impact adversely upon them. The Council will promote the County's hedgerows by increasing coverage, where possible, using locally native species and to develop an appropriate code of practice for road hedgerow maintenance.</p> <p>Policy Objective GIB26: Geological Sites It is a Policy Objective to protect, promote and preserve sites of Geological and Geomorphological importance, in particular the proposed Natural Heritage Areas (NHAs), and any County Geological Sites (CGS), that become designated during the lifetime of the Plan.</p> <p>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 belt areas, where appropriate.</p> <p>Policy Objective GIB28: Invasive Species It is a Policy Objective to prepare an 'Invasive Alien Species Action Plan' for the County which will include actions in relation to invasive alien species (IAS) surveys, management and treatment and to also ensure that proposals for development do not lead to the spread or introduction of invasive species. If developments are proposed on sites where invasive species are or were previously present, the applicants will be required to submit a control and management program for the particular invasive species as part of the planning process and to comply with the provisions of the European Communities Birds and Habitats Regulations 2011 (S.I. 477/2011).</p> <p>Policy Objective GIB29: 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.</p> <p>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. In the Glencullen area, new development will not be permitted which could damage groundwater resources or prevent use of this resource. Regard should be had to the Dún Laoghaire-Rathdown commissioned "Groundwater Strategy for the Glencullen Aquifer" (2018).</p>

Topic	Potentially Significant Adverse Effect, if Unmitigated	Recommendations integrated into the Draft Plan, included in: (this text will be updated at adoption of the Plan to take account of any Alterations/Modifications made)
		<p>Policy Objective E17: Water Supply and Wastewater treatment and Appropriate Assessment It is a Policy Objective to require that all developments relating to water supply and wastewater treatment are subject to screening for Appropriate Assessment to ensure there are no likely significant effects on the integrity, 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 RSES).</p> <p>Policy Objective OSR11: Water-Based Sports It is a Policy Objective to support and encourage water-based sports and maritime leisure activities along the coast subject to Council Bye-Laws, and the Habitats and Birds Directives. The County features seventeen kilometres of coastline, which is a valuable asset. If utilised to its full potential it can contribute to the health and well-being of the residents of, and workers, in the County and will increase sport and physical activity participation levels locally. These activities can also offer significant potential for tourism growth.</p> <p>Policy Objective E11: Sustainable Management of Water It is a Policy Objective to work with Irish Water:</p> <ul style="list-style-type: none"> • 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 River Basin Management Plan or any updated version of the document, 'Water Quality in Ireland 2013-2018'(2019) or any updated version of the document, Pollution Reduction Programmes for Designated Shellfish Areas, the Urban Waste Water Treatment Directive and the Habitats Directive. <p>Policy Objective E17: Water Supply and Wastewater treatment and Appropriate Assessment It is a Policy Objective to require that all developments relating to water supply and wastewater treatment are subject to screening for Appropriate Assessment to ensure there are no likely significant effects on the integrity, 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 RSES).</p> <p>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.</p> <p>Special Local Objective 18 To promote the development of the Dublin Bay Trail as a component part of the National East Coast Trail Cycle Route up to the boundary with Co. Wicklow. Any development proposals shall be subject to Appropriate Assessment Screening in accordance with the requirements of the EU Habitats Directive to ensure the protection and preservation of all designated SACs, SPAs, and pNHA(s) in Dublin Bay and the surrounding area.</p> <p>Special Local Objective 35 To promote Water Leisure Facilities for public use at the coastal fringe of the Gut and rear of the West Pier, subject to the appropriate environmental assessments including any assessment required under the Habitats Directive in co-operation with the relevant agencies.</p> <p>Special Local Objective 115 - To provide an open seawater pool as a part of any future phase of the development at the Dún Laoghaire Baths site. This provision shall take into account environmental feasibility, including ecological, water and cultural heritage sensitivities. Any proposals shall be subject to Appropriate Assessment Screening in accordance with the requirements of the EU Habitats Directive and shall ensure the protection and preservation of all designated SACs, SPAs, and pNHA(s) in Dublin Bay and the surrounding area.</p> <p>Special Local Objective 116 - To provide a cultural and heritage centre in the environs of the Dún Laoghaire Harbour that focusses on the unique history of emigration from the Carlisle Pier, the construction of the harbour and the celebration of the first suburban rail line. Any proposals shall be subject to Appropriate Assessment Screening in accordance with the requirements of the EU Habitats Directive and shall ensure the protection and preservation of all designated SACs, SPAs, and pNHA(s) in Dublin Bay and the surrounding area.</p> <p>Special Local Objective 117 - The feasibility of incorporating the East Coast Cycle Trail into any coastal protection works required between Corbawn Lane and the proposed DART station at Woodbrook should be investigated. Such works shall be carried out in accordance with the recommendations of the Coastal Defence Strategy (2010) or any future Strategy. Any proposals shall be subject to Appropriate Assessment Screening in accordance with the requirements of the EU Habitats Directive and shall ensure the protection and preservation of all designated SACs, SPAs, and pNHA(s) in Dublin Bay and the surrounding area.</p> <p>Requirements under Chapter 12: Development Management, including those under the headings of:</p> <p>Impacts on the Environment</p> <ul style="list-style-type: none"> • Environmental Impact Assessment • Appropriate Assessment • Ecological Impact Assessment <p>Green Infrastructure and Biodiversity</p> <ul style="list-style-type: none"> • Green Infrastructure • Biodiversity • Sensitive Landscapes and Site Features • High Amenity Landscapes, Views and Prospects • Fencing of Hitherto Open Land <p>Construction Management Plan requirements under Plan Sections 12.9.4 to 12.9.6</p> <p>References to the protection of European sites/Appropriate Assessment or the Habitats Directive in the detailed text under:</p> <ul style="list-style-type: none"> • Policy Objective T13: Coastal Cycling Infrastructure Objective • Policy Objective T22: Roads and Streets • Policy Objective GIB10: Dublin Bay Biosphere • Policy Objective GIB18: Protection of Natural Heritage and the Environment

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		<ul style="list-style-type: none"> • Policy Objective GIB19: Habitats Directive • Policy Objective GIB21: Designated Sites • Policy Objective GIB23: County-Wide Ecological Network • Policy Objective GIB24: Rivers and Waterways • Policy Objective EI3: Wastewater Treatment Systems • Policy Objective EI23: Flood Risk Management • Policy Objective OSR8: Greenways and Blueways Network: Requirements under Chapter 13 Land Use Zoning Objectives, under the heading of Appropriate Assessment
Population and human health	<ul style="list-style-type: none"> • Potential adverse effects arising from flood events. • Potential interactions if effects arising from environmental vectors. 	<p>Also see measures under other environmental components including Soil, Water and Air and Climatic Factors.</p> <p>Policy Objective T26: 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.</p> <p>Policy Objective EI15: Air and Noise Pollution It is a Policy Objective:</p> <ul style="list-style-type: none"> • 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'. <p>Policy Objective EI16: 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.</p> <p>Policy Objective EI17: 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.</p> <p>Policy Objective EI18: 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.</p>
Soil	<ul style="list-style-type: none"> • Potential adverse effects on the hydrogeological and ecological function of the soil resource, including as a result of development on contaminated lands. • Potential for riverbank and coastal erosion. 	<p>Also see measures under other environmental components including Water.</p> <p>Coastal Protection Policy Objective EI25: Coastal Defence It is a Policy Objective to implement and have regard to the recommendations of the Coastal Defence Strategy (2010) for the County where feasible. The Council will endeavour to (i) obtain funding from the OPW in order to undertake defence measures for specific areas as prioritised in the Strategy (ii) become part of any future national OPW Coastal Monitoring Survey Programme. Where feasible and appropriate the Council will endeavour to incorporate leisure and transport objectives with coastal protection.</p> <p>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.</p>
Water	<ul style="list-style-type: none"> • 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. 	<p>Also see measures under other environmental components including Soil and Material Assets.</p> <p>Policy Objective EI5: River Basin Management Plans (RMBPs) It is a Policy Objective:</p> <ul style="list-style-type: none"> • 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. <p>Policy Objective EI8: 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.</p> <p>Policy Objective EI11: Rathmichael Groundwater and Surface Water Protection It is a Policy Objective to not consider granting planning permission for any new developments which include an on-site wastewater treatment facility within the Rathmichael area until the groundwater issues in the area are resolved or ameliorated (see SLO 93 Maps 10, and 14).</p> <p>Policy Objective EI17: 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.</p>

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		<p>Flood Risk Policy Objective EI22: Catchment Flood Risk Assessment and Management (CFRAM) It is a Policy Objective to assist the Office of Public Works (OPW) in the design and construction of flood relief schemes approved in the ten-year Programme of Investment in Flood Relief Measures following from the recommendations and outputs of the CFRAM for the Eastern District that are relevant for DLR.</p> <p>Policy Objective EI23: Flood Risk Management It is a Policy Objective to support, in cooperation with the OPW, the implementation of the EU Flood Risk Directive (2001/60/EC) on the assessment and management of flood risks, the Flood Risk Regulations (SI No 122 of 2010) and the Department of the Environment, Heritage and Local Government and the Office of Public Works Guidelines on 'The Planning System and Flood Risk Management' (2009) and relevant outputs of the Eastern District Catchment and Flood Risk Assessment and Management Study (ECFRAMS Study). Implementation of the above shall be via the policies and objectives of the Strategic Flood Risk Assessment set out in Appendix 16 of this Plan.</p> <p>Policy Objective EI24: Cross Boundary Flood Management It is a Policy Objective to work with neighbouring Local Authorities when developing cross boundary flood management work programmes and when considering cross boundary development.</p>
Air Climatic and Factors	<ul style="list-style-type: none"> • 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. 	<p>Also refer to various sustainable mobility and transport provisions in Chapters 5 and 12 of the Plan and the overall approach to compact development and sustainability provided by the Plan.</p> <p>Policy Objective CA1: National Climate Action Policy It is a Policy Objective to support the implementation of International and National objectives on climate change including the 'Climate Action Plan 2019 to Tackle Climate Breakdown', the 'National Adaptation Framework' 2018 and the 'National Energy and Climate Plan 2021-2030' and other relevant policy and legislation, that support the climate action policies included in the County Development Plan.</p> <p>Policy Objective CA2: Regional Climate Action 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 (SEAI) to achieve the climate action policies and objectives set out in the Eastern and Midland Region Spatial and Economic Strategy (consistent with RPO 3.1, 3.6, 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).</p> <p>Policy Objective CA3: Measuring Greenhouse Gas Impacts It is a Policy Objective that spatial and infrastructure planning are consistent with climate mitigation and adaptation objectives. When it is available, the Council will be informed by the work led by the Eastern and Midland Regional Assembly to develop a methodology for quantifying the GHG impacts of spatial planning policies, (QGasSP, an ESPON EU research programme) and the forthcoming Development Plan Guidelines or other national Guidance as appropriate. The Council will quantify the GHG impacts for this County Development Plan when EMRA guidelines become available. (Consistent with NPO 54 of the NPF and RPO 3.6 of the RSES)</p> <p>Policy Objective CA4: Dún Laoghaire Rathdown County Council Climate Change Action Plan 2019-2024 (DLR CCAP) It is a Policy Objective to implement the Dún-Laoghaire Rathdown County Council Climate Change Action Plan 2019 - 2024 (DLR CCAP) and to transition to a climate resilient low carbon County. (Consistent with SO8 of the NPF, RPO 7.32, 7.33 of the RSES)</p> <p>Policy Objective CA5: Energy Performance in Buildings It is a Policy Objective to support high levels of energy conservation, energy efficiency and the use of renewable energy sources in existing and new buildings, including retro fitting of energy efficiency measures in the existing building stock.</p> <p>Policy Objective CA6: Retrofit and Reuse of Buildings It is a Policy Objective to require the retrofitting and reuse of existing buildings rather than their demolition and reconstruction where 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 and 7.41 of the RSES).</p> <p>Policy Objective CA7: Construction Materials It is a Policy Objective to support the use of structural materials in the construction industry that have low to zero embodied energy and CO2 emissions. (Consistent with the RPO 7.41 of the RSES)</p> <p>Policy Objective CA8: Sustainability in Adaptable Design It is a Policy Objective to promote sustainable approaches to the improvement of standards for habitable accommodation, by allowing dwellings to be flexible, accessible and adaptable in their spatial layout and design.</p> <p>Policy Objective CA9: Radon Gas It is a Policy Objective, in partnership with other relevant agencies, to promote best practice in the implementation of radon prevention measures.</p> <p>Policy Objective CA10: Renewable Energy It is a Policy Objective to support County, Regional, National and International initiatives and pilot schemes to encourage the development and use of renewable energy sources, including the SEAI Sustainable Energy Community initiatives, as a means of transitioning to a low carbon climate resilient County in line with national renewable energy targets.</p> <p>Policy Objective CA11: Onshore and Offshore Wind Energy and Wave Energy It is a Policy Objective to support in conjunction with other relevant agencies, wind energy initiatives, both on-shore and offshore, and wave energy, when these are 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 RSES)</p> <p>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 they do not negatively impact upon the environmental quality or amenity of the area, as a renewable energy resource which can contribute to the transition to a low carbon climate resilient County.</p>

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		<p>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.</p> <p>Policy Objective CA14: District Heating It is a Policy Objective to support the development of district heat networks and the utilisation of waste heat recovery in the County as a renewable or low energy resource which can contribute to the transition to a low carbon climate resilient County. The Planning 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 RPO 7.38 of the RSES)</p> <p>Policy Objective CA15: 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 infrastructure.</p> <p>Policy Objective CA16: Electric Vehicles It is a 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 roads and other suitable location. The provision of e-bike chargers will be supported subject to the availability of Funding. (Consistent with NSO 4 of the NPF and RPO 7.42 of RSES)</p> <p>Policy Objective CA17: Urban Greening It is a Policy Objective to promote urban greening - as an essential accompanying policy to compact growth - which supports the health and wellbeing of the living and working population, building resilience to climate change whilst ensuring healthy placemaking. Significant developments shall include urban greening as a fundamental element of the site and building design incorporating measures such as high quality biodiverse landscaping (including tree planting), nature based solutions to SUDS and providing attractive routes and facilities for the pedestrian and cyclist (Consistent with RPO 7.6, 7.22, 7.23, 9.10 of the RSES).</p> <p>Policy Objective T26: 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.</p> <p>Policy Objective EI15: Air and Noise Pollution It is a Policy Objective: <ul style="list-style-type: none"> • 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'. </p>
Material Assets	<ul style="list-style-type: none"> • 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). 	<p>Also see measures under other environmental components including Population and Human Health, Cultural Heritage, Soil, Water, Air and various Land Use Zoning provisions from the Plan.</p> <p>Policy Objective T25: 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 TII's '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.</p> <p>Policy Objective T28: 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.</p> <p>Policy Objective EI1: Sustainable Management of Water It is a Policy Objective to work with Irish Water: <ul style="list-style-type: none"> • 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 River Basin Management Plan or any updated version of the document, 'Water Quality in Ireland 2013-2018'(2019) or any updated version of the document, Pollution Reduction Programmes for Designated Shellfish Areas, the Urban Waste Water Treatment Directive and the Habitats Directive. </p> <p>Policy Objective EI2: Irish Water Enabling Policies Irish Water's Plans and Programmes It is a Policy Objective - in conjunction with the Eastern and Midland Regional Authority, where appropriate - to work with and support Irish Water in the delivery of the strategic objectives and strategic water and wastewater projects and infrastructure as set out in the 'Water Services Strategic Plan' (2015), any subsequent plan, Irish Water's Capital Investment Plan 2020 – 2024, any subsequent Capital Investment Plans and the forthcoming National Water Resources Plan, so as to ensure provision of infrastructure to service settlements in accordance with the Core Strategy of this Plan, and the settlement strategy of the RSES. (Consistent with RPO 10.2, 10.3, 10.11, 10.16 of the RSES)</p> <p>Reducing Leakage It is a Policy Objective to work with Irish Water to reduce leakage in accordance with any forthcoming Irish Water Regional Water Conservation Strategy. (Consistent with RPO 10.4 of the RSES)</p> <p>Water and Wastewater Network Design and Construction It is a Policy Objective to support the provision of integrated and sustainable water services through consultation with Irish Water on the layout and design of water services in relation to the selection and planning of development areas and the preparation of plans.</p>

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	<ul style="list-style-type: none"> Increases in waste levels. Potential impacts upon public assets and infrastructure. Potential interactions at local level between agricultural waste and soil, water, biodiversity and human health – including nitrogen deposition as a result of agricultural activities. However, this is likely to be a less significant issue at County level due to low levels of intensive agriculture. 	<p>Promote Water Conservation It is a Policy Objective in conjunction with Irish Water to promote and support water conservation and demand management measures among all water users in existing and new developments. (Consistent with NSO 9 of the NPF, RSO 7 and RPO 10.1 of the RSES)</p> <p>Policy Objective E13: Wastewater Treatment Systems It is a Policy Objective that all new developments in areas served by a public foul sewerage network connect to the public sewerage system, either directly or indirectly. It is a Policy Objective to promote the changeover from septic tanks to collection networks where this is feasible and to strongly discourage the provision of individual septic tanks and domestic wastewater treatment systems in order to minimise the risk of groundwater pollution.</p> <p>Policy Objective E14: Water Drainage Systems It is a Policy Objective to require all development proposals to provide a separate foul and surface water drainage system – where practicable. (Consistent with RPO 10.12)</p> <p>Policy Objective E16: Sustainable Drainage Systems It is a Policy Objective to ensure that all development proposals incorporate Sustainable Drainage Systems (SuDS).</p> <p>Policy Objective E17: Water Supply and Wastewater treatment and Appropriate Assessment It is a Policy Objective to require that all developments relating to water supply and wastewater treatment are subject to screening for Appropriate Assessment to ensure there are no likely significant effects on the integrity, 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 RSES).</p> <p>Policy Objective E19: Drainage Impact Assessment It is a Policy Objective to ensure that all new developments prepare a Drainage Impact Assessment that meets the requirements of the Council's Development Management Thresholds Information Document (see Appendix 3) and the Stormwater Management Policy (See Appendix 7.1).</p> <p>Policy Objective E110: Storm Overflows of Sewage to Watercourses It is a Policy Objective to work alongside Irish Water to minimise the number and frequency of storm overflows of sewage to watercourses and to establish, in co-operation with the adjoining Local Authorities and Irish Water, a consistent approach to the design, improvement and management of these intermittent discharges to ensure that the needs of the Region's receiving waters are met in a cost effective manner.</p> <p>Policy Objective E112: 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 recovery and recirculation of resources. Underpinning this objective is the requirement to conform to the European Union and National Waste Management Hierarchy of the most favoured options for waste as illustrated below subject to economic and technical feasibility and Environmental Assessment. (Consistent with RPO 10.25 of the RSES)</p> <p>Policy Objective E113: Waste Management Infrastructure, Prevention, Reduction, Reuse and Recycling It is a Policy Objective: <ul style="list-style-type: none"> To support the principles of the circular economy, good waste management and the implementation of best international practice in relation to waste management in order for the County and the Region to become self-sufficient in terms of resource and waste management and to provide a waste management infrastructure that supports this objective. To aim to provide a supporting waste management infrastructure in the County for the processing and recovery of waste streams such as mixed municipal waste in accordance with the proximity principle. To provide for civic amenity facilities and bring centres as part of an integrated waste collection system in accessible locations throughout the County and promote the importance of kerbside source segregated collection of household and commercial waste as the best method to ensure the quality of waste presented for recycling is preserved. To ensure any waste amenity facilities adhere to the Waste Regional Offices Waste Management Infrastructure siting guidelines. To develop a County wide network of multi material recycling centres, bring centres and a reuse centre and to require the provision of adequately-sized recycling facilities in new commercial and large-scale residential developments, where appropriate. To promote the inclusion of such centres in all large retail developments to maximise access by the public. To ensure new developments are designed and constructed in line with the Council's Guidelines for Waste Storage Facilities (an excerpt of which is contained in Appendix 6). </p> <p>Policy Objective E114: Hazardous Waste It is a Policy Objective to adhere to the recommendations of the 'National Hazardous Waste Management Plan 2014-2020' and any subsequent plan, and to co-operate with other agencies, to plan, organise, authorise and supervise the disposal of hazardous waste streams, including hazardous waste identified during construction and demolition projects.</p> <p>Construction Management Plan requirements under Plan Sections 12.9.4 to 12.9.6 Various provisions under Chapter 6: Enterprise and Employment, including</p> <p>Policy Objective E17: Maritime Economy It is a Policy Objective to support the sustainable development of the maritime economy.</p> <p>Policy Objective E18: Rural Development It is a Policy Objective to facilitate the development of acceptable rural enterprises and to minimise pollution from agricultural and industrial sources by means of development management and water pollution legislation.</p>
Cultural Heritage	<ul style="list-style-type: none"> Potential effects on protected and unknown archaeology and protected architecture arising from 	<p>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.</p>

Topic	Potentially Significant Adverse Effect, if Unmitigated	Recommendations integrated into the Draft Plan, included in: (this text will be updated at adoption of the Plan to take account of any Alterations/Modifications made)
	construction and operation activities.	<p>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 development proposals affecting sites listed in the Record of Monuments and Places, the Council will have regard to the advice and/ or recommendations of the Department of Culture, Heritage and the Gaeltacht (DCHG).</p> <p>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 the Gaeltacht (DCHG) (consistent with RPO 9.27 of the RSES).</p> <p>Policy Objective HER4: Carrickmines Castle Site It is a Policy Objective to support the implementation of the (Archaeological) Conservation Plan for the Carrickmines Castle Site.</p> <p>Policy Objective HER5: Historic Burial Grounds It is a Policy Objective to protect historical and/or closed burial grounds within the County and encourage their maintenance in accordance with good conservation practice and to promote access to such sites where possible.</p> <p>Policy Objective HER6: Underwater Archaeology It is a Policy Objective for all developments, which have potential to impact on riverine, intertidal and sub-tidal environments to require an archaeological assessment prior to works being carried out.</p> <p>Architectural Heritage Policy Objective HER7: Record of Protected Structures It is a Policy Objective to include those structures that are considered in the opinion of the Planning Authority to be of special architectural, historical, archaeological, artistic, cultural, scientific, technical or social interest in the Record of Protected Structures.</p> <p>Policy Objective HER8: Work to Protected Structures It is a Policy Objective to:</p> <ul style="list-style-type: none"> i. Protect structures included on the RPS from any works that would negatively impact their special character and appearance; 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; iii. Ensure that all works are carried out under supervision of a qualified professional with specialised conservation expertise; iv. Ensure that any development, modification, alteration, or extension affecting a Protected Structure and/or its setting is sensitively sited and designed, and is appropriate in terms of the proposed scale, mass, height, density, layout, and materials; v. Ensure that the form and structural integrity of the Protected Structure is retained in any redevelopment and that the relationship between the Protected Structure and any complex of adjoining buildings, designed landscape features, or views and vistas from within the grounds of the structure are respected; vi. Respect the special interest of the interior, including its plan form, hierarchy of spaces, architectural detail, fixtures and fittings and materials; vii. Ensure that new and adapted uses are compatible with the character and special interest of the Protected Structure; viii. Protect the curtilage of protected structures and to refuse planning permission for inappropriate development within the curtilage and attendant grounds that would adversely impact on the special character of the Protected Structure; ix. Protect and retain important elements of built heritage including historic gardens, stone walls, entrance gates and piers and any other associated curtilage features; x. Ensure historic landscapes and gardens associated with Protected Structures are protected from inappropriate development (consistent with NPO 17 of the NPF and RPO 9.30 of the RSES). <p>Policy Objective HER9: Protected Structures Applications and Documentation It is a Policy Objective to require all planning applications relating to Protected Structures to contain the appropriate level of documentation in accordance with Article 23 (2) of the Planning Regulations and Chapter 6 and Appendix B of the 'Architectural Heritage Protection Guidelines for Planning Authorities', or any variation thereof.</p> <p>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 interventions to comply with the requirements of the Building Regulations - with particular reference to Part B and Part M.</p> <p>Policy Objective HER11: Energy Efficiency of Protected Structures It is a Policy Objective to have regard to the Department of Environment, Heritage and Local Government's publication on 'Energy Efficiency in Traditional Buildings' (2010) and the Irish Standard IS EN 16883:2017 'Conservation of cultural heritage - guidelines for improving the energy performance of historic buildings' (2017) and any future advisory documents in assessing proposed works on Protected Structures.</p> <p>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', made under Section 53 of the Planning Acts, will be taken into account when the Planning Authority is considering proposals for development that would affect the historic or architectural interest of these structures.</p> <p>Policy Objective HER13: Architectural Conservation Areas It is a Policy Objective to:</p> <ul style="list-style-type: none"> 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. ii. 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.

Topic	Potentially Significant Adverse Effect, if Unmitigated	Recommendations integrated into the Draft Plan, included in: (this text will be updated at adoption of the Plan to take account of any Alterations/Modifications made)
		<p>iv. 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 style.</p> <p>v. Ensure street furniture is kept to a minimum, is of good design and any redundant street furniture removed.</p> <p>vi. 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.</p> <p>Policy Objective HER14: Demolition within an ACA It is a Policy Objective to prohibit the demolition of a structure(s) that positively contributes to the character of the ACA.</p> <p>Policy Objective HER15: Shopfronts within an ACA It is a Policy Objective to:</p> <p>i. Ensure that all original and traditional shopfronts which contribute positively to the appearance and character of a streetscape within an ACA are retained and restored.</p> <p>ii. Ensure that new shopfronts are well-designed, through the sympathetic use of scale, proportion and materials (Refer also to Chapter 12, Section 12.6.8).</p> <p>Policy Objective HER16: Public Realm and Public Utility works within an ACA It is a Policy Objective to:</p> <p>i. Retain or sensitively reintegrate any surviving items of historic street furniture and finishes such as granite kerbing and paving that contribute to the character of an ACA.</p> <p>ii. Ensure that works to the public realm - such as the provision of traffic control measures, street furniture, materials and finishes - have regard to the distinctive character of the area.</p> <p>iii. Encourage the undergrounding of over-head services and the removal of redundant wiring/cables within an ACA.</p> <p>Policy Objective HER17: Candidate Architectural Conservation Areas It is a Policy Objective to assess candidate Architectural Conservation Areas to determine if they meet the requirements and criteria for re-designation as Architectural Conservation Areas.</p> <p>Policy Objective HER18: Development within a Candidate Architectural Conservation Area It is a Policy Objective that development proposals within a candidate Architectural Conservation Area will be assessed having regard to the impact on the character of the area in which it is to be placed.</p> <p>Policy Objective HER19: Protection of Buildings in Council Ownership It is a Policy Objective to:</p> <p>i. Continue to demonstrate best practice with regard to Protected Structures, Recorded Monuments and other elements of architectural heritage in its ownership and care.</p> <p>ii. Ensure any works are undertaken having regard to the Department of Culture, Heritage and the Gaeltacht 'Advice Series' publications on how best to carry out repairs and maintain historic buildings and ensure the use of specialist practitioners in the field of conservation.</p> <p>Policy Objective HER20: Buildings of Vernacular and Heritage Interest It is a Policy Objective to:</p> <p>i. Retain, where appropriate, and encourage the rehabilitation and suitable reuse of existing older buildings/structures/features which make a positive contribution to the character and appearance of the area and streetscape in preference to their demolition and redevelopment and to preserve surviving shop and pub fronts of special historical or architectural interest including signage and associated features.</p> <p>ii. Encourage the retention and/or reinstatement of original fabric of our historic building stock such as windows, doors, roof coverings, shopfronts, pub fronts and other significant features.</p> <p>iii. Ensure that appropriate materials be used to carry out any repairs to the historic fabric.</p> <p>Policy Objective HER21: Nineteenth and Twentieth Century Buildings, Estates and Features: It is a Policy Objective to:</p> <p>i. Encourage the appropriate development of exemplar nineteenth and twentieth century buildings, and estates to ensure their character is not compromised.</p> <p>ii. Encourage the retention and reinstatement of features that contribute to the character of exemplar nineteenth and twentieth century buildings, and estates such as roofscapes, boundary treatments and other features considered worthy of retention.</p> <p>Policy Objective HER22: Protection of Historic Street Furniture and Public Realm It is a Policy Objective to:</p> <p>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.</p> <p>ii. Promote high standards for design, materials and workmanship in public realm improvements within areas of historic character.</p> <p>Policy Objective HER23: Industrial Heritage It is a Policy Objective to:</p> <p>i. Have regard to those items identified in the Industrial Heritage Survey listed in Appendix 4 when assessing any development proposals.</p> <p>ii. Identify further sites of industrial heritage significance with a view to assessing them for inclusion in the Record of Protected Structures.</p> <p>Policy Objective HER24: Protection of Coastline Heritage It is a Policy Objective to:</p> <p>i. Encourage and promote the retention of features of the County's coastal heritage where these contribute to the character of the area.</p> <p>ii. Have regard to those items identified in the Coastal Architecture Heritage Survey when assessing any development proposals.</p> <p>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.</p> <p>Policy Objective HER26: Historic Demesnes and Gardens It is a Policy Objective that historic demesnes and gardens should be identified and protected to reflect and acknowledge their significance as part of our National Heritage. The following houses and gardens are listed: Cabinteely House, Marlay House, Fernhill and Old Conna.</p>

Topic	Potentially Significant Adverse Effect, if Unmitigated	Recommendations integrated into the Draft Plan, included in: (this text will be updated at adoption of the Plan to take account of any Alterations/Modifications made)
		<p>Policy Objective HER27: Civic Memorials It is a Policy Objective that the Council will, at appropriate times and having due regard to resources and suitable subject matter, erect civic memorials in accordance with Part 1 of the Council's Memorials Policy adopted in 2011 in order to raise awareness of the County's history and heritage.</p> <p>Policy Objective HER29: The Metals It is a Policy Objective to manage and enhance The Metals from the Peoples Park to Dalkey giving due regard to its historic importance while continuing to facilitate and encourage its use as a walking and cycling route between Dún Laoghaire and Dalkey.</p> <p>Requirements under Chapter 12: Development Management, including those under the headings of: Heritage</p> <ul style="list-style-type: none"> • Archaeological Heritage • Architectural Heritage - Protected Structures • Architectural Conservation Areas (ACAs) • New Development within an ACA
Landscape	<ul style="list-style-type: none"> • Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape. 	<p>Landscape</p> <p>Policy Objective GIB2: Landscape Character Areas It is a Policy Objective to continue to protect, manage and plan to conserve, maintain or enhance the distinctive characteristics of the County's landscapes, townscapes and seascapes in accordance with the recommended strategies as originally outlined in the Landscape Character Assessment (2002 and since updated), in accordance with the 'Draft Guidelines for Landscape and Landscape Assessment' (2000) as issued by the Department of Environment and Local Government, in accordance with the European Landscape Convention (Florence Convention) and in accordance with 'A National Landscape Strategy for Ireland – 2015-2025'. The Council shall implement any relevant recommendations contained in the Department of Arts, Heritage, and the Gaeltacht's National Landscape Strategy for Ireland, 2015 - 2025.</p> <p>Policy Objective GIB3: Seascape It is a Policy Objective to carry out a Local Seascape Assessment in accordance with any relevant recommendations or methodologies contained in the Irish Marine Institute's National Seascape Character Assessment and the Department of Culture, Heritage and the Gaeltacht's 'National Landscape Strategy for Ireland, 2015 – 2025'.</p> <p>Policy Objective GIB4: High Amenity Zones It is Policy Objective to conserve and enhance existing High Amenity Zones and to seek to manage these and other areas to absorb further recreational uses and activity without damaging their unique character.</p> <p>Policy Objective GIB5: Historic Landscape Character Areas In assessing development proposals and in the preparation of plans, it is a Policy Objective to have regard to the recommendations and findings of the Historic Landscape Character Assessments (HLCA), already undertaken for a number of the urban-rural fringe areas of the County most likely to come under development pressure.</p>

Table 9.2 identifies some of the key text that was integrated into the Plan as a direct result of SEA and AA recommendations for the Draft Plan 2022-2028.

Table 9.2 Selection of Recommendations from the SEA and AA processes

Chapter	Recommended Text Integrated into the Draft Plan (this text will be updated at adoption of the Plan to take account of any Alterations/Modifications made)
	Normal black text like this was already part of the emerging Draft Plan; Green text like this was proposed to be added to the Plan; Red strikethrough text like this was proposed to be deleted from the Plan
2 Core Strategy	<p>Ecosystems Services Approach and Natural Capital 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. The Ecosystems Services Approach followed by the Plan provides a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way.</p> <p>Ecosystem Services Approach principles include:</p> <ul style="list-style-type: none"> d) Consideration of natural systems - by using knowledge of interactions in nature and how ecosystems function (this has been considered in preparing Chapters including no. 3, 8, 9 and 10) e) Taking into account of the services that ecosystems provide - including those that underpin social and economic well-being, such as flood and climate regulation (this has been considered in preparing Chapters including no. 3 and 8) or recreation, culture and quality of life (this has been considered in preparing Plan Chapters including no. 9 and 11) f) Involving people - those who benefit from the ecosystem services and those managing them need to be involved in decisions that affect them. Public consultation has informed the preparation of the Draft Plan which will be further refined before adoption, taking into account submissions/observations made on the Draft Plan during public display. <p>Natural capital consists of renewable and non-renewable resources (e.g. plants, animals, air, water, soils, minerals) which need to be managed. In recognition of this, policy objectives have been integrated into the Plan that will contribute towards 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.</p>

Chapter	<p style="text-align: center;">Recommended Text Integrated into the Draft Plan</p> <p style="text-align: center;">(this text will be updated at adoption of the Plan to take account of any Alterations/Modifications made)</p> <p style="text-align: center;">Normal black text like this was already part of the emerging Draft Plan; Green text like this was proposed to be added to the Plan; Red strikethrough text like this was proposed to be deleted from the Plan</p>
	<p>Policy Objective CS7 - Ecosystem Services Approach It is a policy objective to promote an Ecosystem Services Approach in the preparation of lower-level plans, strategies and Development Management.</p>
5 Transport and Mobility	<p>Policy Objective T24: Environmental Assessment of New Roads It is a Policy Objective that where projects for new roads, identified under Section 5.7, are not already provided 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 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 and Stage 2 – Route Identification, Evaluation and Selection.</p>
8 Green Infrastructure and Biodiversity	<ul style="list-style-type: none"> • Caveats added under Policy Objective GIB24 “Rivers and Waterways” to improve flexibility with regard to sustainable development • Reference to “Natura 2000 sites” changed to “European sites” throughout the document <p>8.7.1.2 Policy Objective GIB19: Habitats Directive It is a Policy Objective to ensure the protection of natural heritage and biodiversity, including European sites that form part of the Natura 2000 network, in accordance with relevant EU Environmental Directives and applicable National Legislation, Policies, Plans and Guidelines. Implementation of the above policy will be in accordance with the following and any updated/ superseding documents:</p> <ul style="list-style-type: none"> • EU Directives, including the Habitats Directive (92/43/EEC), as amended, the Birds Directive (2009/147/EC), the Environmental Liability Directive (2004/35/EC), the Environmental Impact Assessment Directive (85/337/EEC 2011/92/EU, as amended by 2014/52/EC), as amended, the Water Framework Directive (2000/60/EC) and the Strategic Environmental Assessment Directive (2001/42/EC). • National legislation, including the Wildlife Acts 1976 and 2010, as amended, the European Communities (Environmental Impact Assessment) Regulations 1989 (SI No. 349 of 1989), as amended, European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018, the European Union (Water Policy) Regulations 2003, as amended, the Planning and Development Act, 2000, as amended, the European Communities (Birds and Natural Habitats) Regulations 2011 (SI No. 477 of 2011), as amended, the European Communities (Environmental Liability) Regulations 2008, as amended, and the Flora Protection Order 2015. • National policy guidelines, including the Landscape and Landscape Assessment Draft Guidelines 2000, the Environmental Impact Assessment Sub- Threshold Development Guidelines 2003, Strategic Environmental Assessment Guidelines 2004, Flood Risk Management Guidelines 2009, Guidelines on the Information to be contained in Environmental Impact Assessment Reports 2017, and the Appropriate Assessment Guidance 2010. • Catchment and Water Resource Management Plans, including the Eastern National River Basin District Management Plan 2018-2021. • Biodiversity Plans and guidelines, including the forthcoming DLR County Biodiversity Action Plan 2021-2026, the National Biodiversity Action Plan 2017-2021, and the EU Biodiversity Strategy 2030. • Ireland's Environment 2016 (EPA) and to make provision, where appropriate, to address the report's goals and challenges.
9 Open Space and Recreation	<p>Policy Objective OSR11: Water-Based Sports It is a Policy Objective to support and encourage water-based sports and maritime leisure activities along the coast subject to Council Bye-Laws and the Habitats and Birds Directives. The County features seventeen kilometres of coastline, which is a valuable asset. If utilised to its full potential it can contribute to the health and well-being of the residents of, and workers, in the County and will increase sport and physical activity participation levels locally. These activities can also offer significant potential for tourism growth.</p> <p>Development Management requirement under Section 12.7.2 “Biodiversity” The Planning Authority may require, where appropriate, Visitor/Management Plans to be submitted as part of the Development Management process for development proposals within or adjacent to an ecological sensitive site, as appropriate. The Visitor/Management Plan shall include appropriate measures to avoid significant negative effects and loss of habitat and associated disturbance to the ecological sensitive site.</p>
10 Environmental Infrastructure	<ul style="list-style-type: none"> • Caveats added under Policy Objectives E17, E123 and Section 10.2.1.4 to ensure consistency with Habitats Directive and Water Framework Directive. <p>Policy Objective E120: Overhead Cables It is a Policy Objective to seek the undergrounding of all electricity, telephone and television cables wherever possible, in the interests of visual amenity and public health. Overhead cables detract from visual amenity and therefore it is Council policy to seek the placing underground of cables. It is the intention of the Council to co-operate with other agencies as appropriate, and to use its development management powers in the implementation of this policy.</p> <p>Where undergrounding of cables is being pursued, proposals should demonstrate that environmental impacts including the following are minimised:</p> <ul style="list-style-type: none"> • Habitat loss as a result of removal of field boundaries and hedgerows (right of way preparation) followed by topsoil stripping (to ensure machinery does not destroy soil structure and drainage properties); • Short to medium term impacts on the landscape where, for example, hedgerows are encountered; • Impacts on underground archaeology; • Impacts on soil structure and drainage; and • Impacts on surface waters as a result of sedimentation.
12 Development Management (work in progress)	<p>Policy Objective CA9: Radon Gas It is a Policy Objective, in partnership with other relevant agencies, to promote best practice in the implementation of radon prevention measures</p>

Chapter	<p style="text-align: center;">Recommended Text Integrated into the Draft Plan</p> <p style="text-align: center;">(this text will be updated at adoption of the Plan to take account of any Alterations/Modifications made)</p> <p style="text-align: center;">Normal black text like this was already part of the emerging Draft Plan; Green text like this was proposed to be added to the Plan; Red strikethrough text like this was proposed to be deleted from the Plan</p>
13 Land Use Zoning Objectives	<p>13.1.1 Purpose of Use Zoning Objectives</p> <p>The purpose of land use zoning is to indicate the development management objectives of the Council for all lands in its administrative area. Nineteen such zones are indicated in this Plan. They are identified by letter and colour on the Development Plan Maps. The land use zones used and the various objectives for these areas are detailed in Tables Nos.13.1.1– 13.1.19. In addition to land use zones being indicated, the accompanying maps detail various other considerations including, but not limited to, environmental, heritage, and locational specific considerations. An objective is also outlined for the Cherrywood Strategic Development Zone.</p> <p>Table Nos. 13.1.1– 13.1.19 inclusive are intended as guidelines in assessing development proposals. However, they relate only to land use. Factors such as making the most efficient use of land, density, height, massing, traffic generation, public health regulations, design criteria, visual amenity, environmental considerations, flooding and potential nuisance by way of noise, odour or air pollution are also of importance in establishing whether or not a development proposal conforms to the proper planning and sustainable development of an area. General guidelines are set out in subsequent paragraphs of this part of the Written Statement and targeted policy objectives development management standards are detailed across Chapters 2-12 and 14.</p> <p>Table Nos. 13.1.1– 13.1.19. list the land use activities most commonly encountered in the County and each is defined in Section 13.2 at the end of this chapter. They are intended as a general guideline and the uses listed are not exhaustive. An applicant is advised to consult with the Planning Authority prior to submitting an application for development in order to ascertain any specific considerations relating to the subject site (see Chapter 12, Development Management, Section 12.1.1.1).</p>
Chapter 14 Specific Local Objectives	<p>SLO115 - To provide an open seawater pool as a part of any future phase of the development at the Dún Laoghaire Baths site. This provision shall take into account environmental feasibility, including ecological, water and cultural heritage sensitivities. Any proposals shall be subject to Appropriate Assessment Screening in accordance with the requirements of the EU Habitats Directive and shall ensure the protection and preservation of all designated SACs, SPAs, and pNHA(s) in Dublin Bay and the surrounding area.</p> <p>SLO116 - To provide a cultural and heritage centre in the environs of the Dún Laoghaire Harbour that focusses on the unique history of emigration from the Carlisle Pier, the construction of the harbour and the celebration of the first suburban rail line. Any proposals shall be subject to Appropriate Assessment Screening in accordance with the requirements of the EU Habitats Directive and shall ensure the protection and preservation of all designated SACs, SPAs, and pNHA(s) in Dublin Bay and the surrounding area.</p> <p>SLO117 - The feasibility of incorporating the East Coast Cycle Trail into any coastal protection works required between Corbawn Lane and the proposed DART station at Woodbrook should be investigated. Such works shall be carried out in accordance with the recommendations of the Coastal Defence Strategy (2010) or any future Strategy. Any proposals shall be subject to Appropriate Assessment Screening in accordance with the requirements of the EU Habitats Directive and shall ensure the protection and preservation of all designated SACs, SPAs, and pNHA(s) in Dublin Bay and the surrounding area.</p>

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 will be used in order to monitor the likely significant effects of implementing the Plan, to which the Proposed Material Alterations relate. It has been guided by the EPA guidance on this issue, “Guidance on SEA Statements and Monitoring” (2020).

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. Each indicator to be monitored is accompanied by the target(s) which were identified with regard to the relevant strategic actions. Given the position of the Development Plan in the land use planning hierarchy beneath the Eastern and Midland Regional Spatial and Economic Strategy (RSES), the measures identified in that RSES 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 programmes.

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 will form part of the wider land use planning framework comprising a hierarchy of policies, plans, programmes, etc. This wider framework, including the National Planning Framework and the Eastern and Midland RSES, is subject to its own SEA (and associated monitoring) requirements. At lower tiers of the hierarchy, lower tier land use plans and 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).

10.4 Reporting

The Council shall, in conjunction with the Regional Assembly and other sources as relevant, implement the monitoring programme as set out on Table 10.1. This will include the preparation of stand-alone SEA Monitoring Reports:

1. To accompany the report required of the manager under Section 15(2) of the Act, including information in relation to progress on, and the results of, monitoring the significant environmental effects of implementation of the Plan, as required by Article 13J(2) of the Planning and Development Regulations 2001 (as amended);
2. On the significant environmental effects of implementing the Plan, in advance of the beginning of the review of the next Plan.

Table 10.1 Indicators, Targets, Sources and Remedial Action

Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action
Biodiversity, Flora and Fauna	BFF	<ul style="list-style-type: none"> Condition of European sites 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 3 years) Consultations with the NPWS (see Section 10.4) 	<ul style="list-style-type: none"> 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.
		<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Internal review of local land use plans 	<ul style="list-style-type: none"> Review internal systems
		<ul style="list-style-type: none"> SEAs and AAs as relevant for new Council policies, plans, programmes etc. 	<ul style="list-style-type: none"> Screen for and undertake SEA and AA as relevant for new Council policies, plans, programmes etc. 	<ul style="list-style-type: none"> Internal monitoring of preparation of local land use plans 	<ul style="list-style-type: none"> Review internal systems
		<ul style="list-style-type: none"> Status of water quality in the County's water bodies 	<ul style="list-style-type: none"> Included under Water below 	<ul style="list-style-type: none"> Included under Water below 	<ul style="list-style-type: none"> Included under Water below
		<ul style="list-style-type: none"> Compliance of planning permissions with Plan measures providing for the protection of Biodiversity and flora and fauna – see Chapter 8 “Green Infrastructure and Biodiversity” 	<ul style="list-style-type: none"> 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” 	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission 	<ul style="list-style-type: none"> Review internal systems
Population and Human Health	PHH	<ul style="list-style-type: none"> Implementation of Plan measures relating to the promotion of economic growth as provided for by Chapter 6 “Enterprise and Employment Strategy” 	<ul style="list-style-type: none"> 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” 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) 	<ul style="list-style-type: none"> Internal review of progress on implementing Plan objectives Consultations with Department of Environment, Climate and Communications (see Section 10.4) 	<ul style="list-style-type: none"> Review internal systems Consultations with Department of Environment, Climate and Communications

Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action
		<ul style="list-style-type: none"> Number of spatial concentrations of health problems arising from environmental factors resulting from development permitted under the Plan 	<ul style="list-style-type: none"> No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan 	<ul style="list-style-type: none"> Consultations with the Health Service Executive and EPA 	<ul style="list-style-type: none"> Consultations with the Health Service Executive and EPA
		<ul style="list-style-type: none"> Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures 	<ul style="list-style-type: none"> Increase in the proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures 	<ul style="list-style-type: none"> CSO data Monitoring of the Dún Laoghaire Rathdown County Council's Climate Change Action Plan 2019-2024 	<ul style="list-style-type: none"> Where proportion of population shows increase in private car use above CSO 2016 figures, the Council will coordinate with the Regional Assembly, the DHLGH, DECC and NTA to develop a tailored response.
		<ul style="list-style-type: none"> Number of spatial plans that include specific green infrastructure mapping 	<ul style="list-style-type: none"> Require all local level land use plans to include specific green infrastructure mapping 	<ul style="list-style-type: none"> Internal review of local land use plans 	<ul style="list-style-type: none"> Review internal systems
Soil (and Land)	^S	<ul style="list-style-type: none"> Proportion of population growth occurring on infill and brownfield lands compared to greenfield (also relevant to Material Assets) 	<ul style="list-style-type: none"> Maintain built surface cover nationally to below the EU average of 4% 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. 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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.
		<ul style="list-style-type: none"> Instances where contaminated material generated from brownfield and infill must be disposed of 	<ul style="list-style-type: none"> Dispose of contaminated material in compliance with EPA guidance and waste management requirements 	<ul style="list-style-type: none"> Internal review of grants of permission where contaminated material must be disposed of 	<ul style="list-style-type: none"> Consultations with the EPA and Development Management
		<ul style="list-style-type: none"> Environmental assessments and AAs as relevant for applications for brownfield and infill development prior to planning permission 	<ul style="list-style-type: none"> Screen for and undertake environmental assessments and AA as relevant for applications for brownfield and infill development prior to planning permission 	<ul style="list-style-type: none"> Internal monitoring of grants of permission 	<ul style="list-style-type: none"> Review internal systems
Water	^W	<ul style="list-style-type: none"> Status of water bodies as reported by the EPA Water Monitoring Programme for the WFD 	<ul style="list-style-type: none"> 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) 	<ul style="list-style-type: none"> EPA Monitoring Programme for WFD compliance 	<ul style="list-style-type: none"> 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, Irish Water 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	Targets	Sources	Remedial Action
					whether it is necessary to coordinate a response with the EMRA, EPA and Irish Water to achieve the necessary capacity.
		<ul style="list-style-type: none"> Number of incompatible developments permitted within flood risk areas 	<ul style="list-style-type: none"> Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk 	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Programmed delivery of Irish Water infrastructure for all key growth towns in line with Irish Water 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 	<ul style="list-style-type: none"> 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, Irish Water 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 	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission Consultations with the Irish Water (see Section 10.4) Department of Housing, Local Government and Heritage in conjunction with Local Authorities 	<ul style="list-style-type: none"> 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 Irish Water to achieve the necessary capacity.
		<ul style="list-style-type: none"> Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures 	<ul style="list-style-type: none"> Increase in the proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures 	<ul style="list-style-type: none"> CSO data Monitoring of the Dún Laoghaire Rathdown County Council's Climate Change Action Plan 2019-2024 	<ul style="list-style-type: none"> Where proportion of population shows increase in private car use above CSO 2016 figures, the Council will coordinate with the Regional Assembly, the DHLGH, DECC and NTA to develop a tailored response.
Air	A	<ul style="list-style-type: none"> Proportion of journeys made by private fossil fuel-based car compared to 2016 National Travel Survey levels of 74% NO_x, SO_x, PM10 and PM2.5 as part of Ambient Air Quality Monitoring 	<ul style="list-style-type: none"> Decrease in proportion of journeys made by private fossil fuel-based car compared to 2016 National Travel Survey levels Improvement in Air Quality trends, particularly in relation to transport related emissions of NO_x and particulate matter 	<ul style="list-style-type: none"> CSO data Data from the National Travel Survey EPA Air Quality Monitoring Consultations with Department of Environment, Climate and Communications (see Section 10.4) 	<ul style="list-style-type: none"> Where proportion of population shows increase in private car use above CSO 2016 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 Component	SEO Code	Indicators	Targets	Sources	Remedial Action
Climatic Factors	C	<ul style="list-style-type: none"> 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" 	<ul style="list-style-type: none"> 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" 	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission 	<ul style="list-style-type: none"> Review internal systems
		<ul style="list-style-type: none"> A competitive, low-carbon, climate-resilient and environmentally sustainable economy 	<ul style="list-style-type: none"> Contribute towards transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050 	<ul style="list-style-type: none"> 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) 	<ul style="list-style-type: none"> 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.
		<ul style="list-style-type: none"> Share of renewable energy in transport 	<ul style="list-style-type: none"> 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 		
		<ul style="list-style-type: none"> Carbon dioxide (CO₂) emissions across the electricity generation, built environment and transport sectors 	<ul style="list-style-type: none"> Contribute towards the target of aggregate reduction in carbon dioxide (CO₂) emissions of at least 80% (compared to 1990 levels) by 2050 across the electricity generation, built environment and transport sectors 		
		<ul style="list-style-type: none"> Energy consumption, the uptake of renewable options and solid fuels for residential heating 	<ul style="list-style-type: none"> To promote reduced energy consumption and support the uptake of renewable options and a move away from solid fuels for residential heating 		
		<ul style="list-style-type: none"> Proportion of journeys made by private fossil fuel-based car compared to 2016 levels 	<ul style="list-style-type: none"> Decrease in the proportion of journeys made by residents of the County using private fossil fuel-based car compared to 2016 levels 	<ul style="list-style-type: none"> CSO data Monitoring of the Dún Laoghaire Rathdown County Council's Climate Change Action Plan 2019-2024 	<ul style="list-style-type: none"> 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.
		<ul style="list-style-type: none"> Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures 	<ul style="list-style-type: none"> Increase in the proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures 	<ul style="list-style-type: none"> CSO data Monitoring of the Dún Laoghaire Rathdown County Council's Climate Change Action Plan 2019-2024 	<ul style="list-style-type: none"> Where proportion of population shows increase in private car use above CSO 2016 figures, the Council will coordinate with the Regional Assembly, the DHLGH, DECC and NTA to develop a tailored response.
Cultural Heritage	CH	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission 	<ul style="list-style-type: none"> 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.
		<ul style="list-style-type: none"> Percentage of entries to the Record of Protected Structures and Architectural Conservation Areas and their context protected from significant adverse effects 	<ul style="list-style-type: none"> Protect entries to the Record of Protected Structures and Architectural Conservation Areas and their context from significant adverse effects arising from new 	<ul style="list-style-type: none"> Consultation with Department of Housing, Local Government and Heritage (see Section 10.4). 	

Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action
		arising from new development granted permission under the Plan	development granted permission under the Plan		
Landscape	L	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission 	<ul style="list-style-type: none"> 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
International/European Level			
SEA Directive (2001/42/EC)	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Carry out an environmental assessment for plans or programmes referred to in Articles 2 to 4 of the Directive. Prepare an environmental report which identifies, describes and evaluates the likely significant effects on the environment of implementing the plan or programme and reasonable alternatives that consider the objectives and the geographical scope of the plan or programme. Consult with relevant authorities, stakeholders and public allowing sufficient time to make a submission. Consult other Member States where the implementation of a plan or programme is likely to have transboundary environmental effects. Inform relevant authorities and stakeholders on the decision to implement the plan or programme. Issue a statement to include requirements detailed in Article 9 of the Directive. Monitor and mitigate significant environmental effects identified by the assessment. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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.
EIA Directive (2011/92/EU as amended by 2014/52/EU)	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All projects listed in Annex I are considered as having significant effects on the environment and require an EIA. For projects listed in Annex II, a “screening procedure” is required to determine the effects of projects on the basis of thresholds/criteria or a case by case examination. This should take into account Annex III. The environmental impact assessment shall identify, describe and assess in an appropriate manner, in the light of each individual case and in accordance with Articles 4 to 12, the direct and indirect effects of a project on the following factors: human beings, fauna and flora, soil, water, air, climate and the landscape, material assets and the cultural heritage, the interaction between each factor. Consult with relevant authorities, stakeholders and public allowing sufficient time to make a submission before a decision is made. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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.
Habitats Directive (92/43/EEC)	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Propose and protect sites of importance to habitats, plant and animal species. Establish a network of European sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex II, to enable the natural habitat types and the species' habitats concerned to be maintained or, where appropriate, restored at a favourable conservation status in their natural range. Carry out comprehensive assessment of habitat types and species present. Establish a system of strict protection for the animal species and plant species listed in Annex IV. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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.
Birds Directive (2009/147/EC)	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Preserve, maintain or re-establish a sufficient diversity and area of habitats for all the species of birds referred to in Annex 1. Preserve, maintain and establish biotopes and habitats to include the creation of protected areas (Special Protection Areas). 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may

SEA Environmental Report relevant Proposed Material Alterations to the Draft Dún Laoghaire-Rathdown CDP 2022-2028

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Ensure the upkeep and management in accordance with the ecological needs of habitats inside and outside the protected zones, re-establish destroyed biotopes and creation of biotopes. Measures for regularly occurring migratory species not listed in Annex I is required as regards their breeding, moulting and wintering areas and staging posts along their migration routes. The protection of wetlands and particularly wetlands of international importance. 	<p>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.</p>
EU Nitrates Directive (91/676/EC)	<ul style="list-style-type: none"> Reducing water pollution caused or induced by nitrates from agricultural sources and – preventing further such pollution. 	<p>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:</p> <ul style="list-style-type: none"> 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 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 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.</p>
EU Integrated Pollution Prevention Control Directive (2008/1/EC)	<ul style="list-style-type: none"> 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. 	<p>The IPPC Directive is based on several principles:</p> <ul style="list-style-type: none"> an integrated approach best available techniques, flexibility; and public participation 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 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.</p>
EU Plant Protection (products) Directive 2009/127/EC	<ul style="list-style-type: none"> 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). 	<ul style="list-style-type: none"> 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 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.</p>
EU Renewables Directive (2009/28/EC)	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 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.</p>
Indirect Land Use Change Directive (2012/0288 (COD))	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Limit the contribution that conventional biofuels (with a risk of ILUC emissions) make towards attainment of the targets in the Renewable Energy Directive; 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in</p>

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	<p>sources in all forms of transport in 2020 is at least 10 % of their final energy consumption.</p> <ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 	<p>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.</p>
Alternative Fuels Infrastructure Directive (2014/94/EU)	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 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.</p>
EU Energy Efficiency Directive (2012/27/EU)	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 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.</p>
EU Seveso Directive (2012/18/EU)	<ul style="list-style-type: none"> 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. 	<p>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:</p> <ul style="list-style-type: none"> 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 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.</p>
European Union Biodiversity Strategy to 2030	<ul style="list-style-type: none"> Aims to halt or reverse biodiversity loss and speed up the EU's transition towards a resource efficient and green economy. 	<p>Outlines six targets and twenty actions to aid European Union in halting the loss to biodiversity and eco-system services. The six targets cover:</p> <ul style="list-style-type: none"> Full implementation of EU nature legislation to protect biodiversity; 	<p>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-</p>

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		<ul style="list-style-type: none"> ○ Maintaining, enhancing and protecting for ecosystems, and green infrastructure; ○ Ensuring sustainable agriculture, and forestry; ○ Sustainable management of fish stocks; ○ Reducing invasive alien species; and ○ Addressing the global need to contribute towards averting global biodiversity loss. 	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 facilitate Green Infrastructure (GI) projects.	<ul style="list-style-type: none"> • Promoting GI in the main EU policy areas. • Supporting EU-level GI projects. • Improving access to finance for GI projects. • Improving information and promoting innovation. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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.
UNESCO (1972) The Convention for the Protection of the World Cultural and Natural Heritage	<ul style="list-style-type: none"> • links concepts of nature conservation and the preservation of cultural properties; and • recognizes the way in which people interact with nature, and the fundamental need to preserve the balance between the two. 	<ul style="list-style-type: none"> • sets out the duties of States Parties in identifying potential sites and their role in protecting and preserving them; • each country pledges to conserve not only the World Heritage sites situated on its territory, but also to protect its national heritage; • encourages to integrate the protection of the cultural and natural heritage into regional planning programmes, set up staff and services at their sites, undertake scientific and technical conservation research and adopt measures which give this heritage a function in the day-to-day life of the community. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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.
UN (1992) The Convention on Biological Diversity	An overall objective is to develop national strategies for the conservation and sustainable use of biological diversity.	<p>The Convention has three main goals:</p> <ul style="list-style-type: none"> • the conservation of biological diversity (or biodiversity); • the sustainable use of its components; and • the fair and equitable sharing of benefits arising from genetic resources. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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.
UN (1992) Framework Convention on Climate Change	It is aimed at stabilising greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.	The Convention acknowledges the vulnerability of all countries to the effects of climate change and calls for special efforts to ease the consequences, especially in developing countries which lack the resources to do so on their own.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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.

SEA Environmental Report relevant Proposed Material Alterations to the Draft Dún Laoghaire-Rathdown CDP 2022-2028

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
UN Kyoto Protocol (2nd Kyoto Period), the Second European Climate Change Programme (ECCP II), Paris climate conference (COP21) 2015 (Paris Agreement)	<p>The UN Kyoto Protocol set of policy measures to reduce greenhouse gas emissions.</p> <p>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.</p> <p>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.</p>	<ul style="list-style-type: none"> The Kyoto Protocol is implemented through the European Climate Change Programme (ECCP II). EU member states implement measures to improve on or compliment the specified measures and policies arising from the ECCP. Under COP21, governments agreed to come together every 5 years to set more ambitious targets as required by science; report to each other and the public on how well they are doing to implement their targets; track progress towards the long-term goal through a robust transparency and accountability system. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 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	<ul style="list-style-type: none"> Binding legislation which aims to ensure the European Union meets its climate and energy targets for 2020. 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. 	<p>Four pieces of complimentary legislation:</p> <ul style="list-style-type: none"> Reform of the EU Emissions Trading System (EU ETS) to include a cap on emission allowances in addition to existing system of national caps. Member States have agreed national targets for non-EU ETS emissions from countries outside the EU. Meet the national renewable energy targets of 16% for Ireland by 2020. Preparing a legal framework for technologies in carbon capture and storage. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 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	<ul style="list-style-type: none"> A 2030 Framework for climate and energy, including EU-wide targets and policy objectives for the period between 2020 and 2030 that has been agreed by European countries. Targets include a 40% cut in greenhouse gas emissions compared to 1990 levels, at least a 27% share of renewable energy consumption and at least 27% energy savings compared with the business-as-usual scenario. 	<p>To meet the targets, the European Commission has proposed the following policies for 2030:</p> <ul style="list-style-type: none"> A reformed EU emissions trading scheme (ETS). New indicators for the competitiveness and security of the energy system, such as price differences with major trading partners, diversification of supply, and interconnection capacity between EU countries. First ideas for a new governance system based on national plans for competitive, secure, and sustainable energy. These plans will follow a common EU approach. They will ensure stronger investor certainty, greater transparency, enhanced policy coherence and improved coordination across the EU. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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.
The Clean Air for Europe Directive (2008/50/EC) (EU Air Framework Directive) Fourth Daughter Directive (2004/107/EC)	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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 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.
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.	<p>The Directive requires competent authorities in Member States to:</p> <ul style="list-style-type: none"> 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; 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to

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		<ul style="list-style-type: none"> 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. <p>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.</p>	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)	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 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.
Water Framework Directive (2000/60/EC)	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> The Drinking Water Abstraction Directive Sampling Drinking Water Directive Exchange of Information on Quality of Surface Freshwater Directive Shellfish Directive Freshwater Fish Directive Groundwater (Dangerous Substances) Directive Dangerous Substances Directive 	<ul style="list-style-type: none"> 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 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.
Groundwater Directive (2006/118/EC)	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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 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.
Drinking Water Directive (98/83/EC)	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 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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		<p>requirements of this Directive and in particular the parametric values set in accordance with Article 5.</p> <ul style="list-style-type: none"> • 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. 	and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Urban Waste Water Treatment Directive (91/271/EEC)	<ul style="list-style-type: none"> • This Directive concerns the collection, treatment and 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. 	<ul style="list-style-type: none"> • 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 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.
Environmental Liability Directive (2004/35/EC) as amended by Directive 2006/21/EC, Directive 2009/31/EC and Directive 2013/30/EU	<ul style="list-style-type: none"> • Establish a framework of environmental liability based on the 'polluter-pays' principle, to prevent and remedy environmental damage. 	<ul style="list-style-type: none"> • 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 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. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 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 Convention on the Protection of the Archaeological Heritage (Valletta 1992)	<ul style="list-style-type: none"> 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 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.
Convention of the Protection of the Architectural Heritage of Europe (Granada 1995)	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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 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.
ICOMOS (2011) Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes ('Dublin Principles')	<ul style="list-style-type: none"> It is aimed to assist in the documentation, protection, conservation and appreciation of industrial heritage as part of the heritage of human societies around the World. 	<ul style="list-style-type: none"> (I) Document and understand industrial heritage structures, sites, areas and landscapes and their values; (II) Ensure effective protection and conservation of the industrial heritage structures, sites, areas and landscapes; (III) Conserve and maintain the industrial heritage structures, sites, areas and landscapes; and (IV) Present and communicate the heritage dimensions and values of industrial structures, sites, areas and landscapes to raise public and corporate awareness, and support training and research. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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.
Council of Europe Framework Convention on the Value of Cultural Heritage for Society (Faro 2005)	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Recognise that rights relating to cultural heritage are inherent in the right to participate in cultural life, as defined in the Universal Declaration of Human Rights. Recognise individual and collective responsibility towards cultural heritage. Emphasise that the conservation of cultural heritage and its sustainable use have human development and quality of life as their goal. Take the necessary steps to apply the provisions of this Convention concerning the role of cultural heritage in the construction of a peaceful and democratic society. Greater synergy of competencies among all the public, institutional and private actors concerned. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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.
European Landscape Convention 2000	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Promote protection, management and planning of landscapes. Organise European co-operation on landscape issues. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 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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The Seventh Environmental Action Programme (EAP) of the European Community (2013-2020)	It identifies three key objectives: <ul style="list-style-type: none"> 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): <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> To make the Union's cities more sustainable. To help the Union address international environmental and climate challenges more effectively. 	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 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.
Bern Convention (Convention on the Conservation of European Wildlife and Natural Habitats)	The convention has three main aims: <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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 Caucasus. 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 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.
Bali Road Map (2007)	The overall goals of the project are twofold: <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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 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.
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: <ul style="list-style-type: none"> Mitigation Transparency of actions Technology Finance Adaptation Forests Capacity building 	Among the most prominent agreements is the establishment of a Green Climate Fund to transfer money from the developed to developing world to tackle the impacts of climate change.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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.
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.	<ul style="list-style-type: none"> 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; 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may

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		<ul style="list-style-type: none"> 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. 	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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> ensuring viable food production that will contribute to feeding the world's population, which is expected to rise considerably in the future; Climate change and sustainable management of natural resources; Looking after the countryside across the EU and keeping the rural economy alive. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 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)	<ul style="list-style-type: none"> Aims to improve the protection of human health and the environment through the better and earlier identification of the intrinsic properties of chemical substances. 	<p>The aims are achieved by applying REACH, namely:</p> <ul style="list-style-type: none"> Registration, Evaluation, Authorisation; and Restriction of chemicals. <p>REACH also aims to enhance innovation and competitiveness of the EU chemicals industry.</p>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 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	<ul style="list-style-type: none"> The objective of the Stockholm Convention is to protect human health and the environment from persistent organic pollutants. 	<ul style="list-style-type: none"> 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 To target additional POPs Other provisions of the Convention relate to the development of implementation plans, information exchange, public information, awareness and education, research, development and monitoring, technical assistance, financial resources and mechanisms, reporting, effectiveness evaluation and non-compliance 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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.
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".	<p>Under the "three pillars" of the Convention, the Contracting Parties commit to:</p> <ul style="list-style-type: none"> 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 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

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			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: <ul style="list-style-type: none"> • 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: <ol style="list-style-type: none"> 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 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.
The European Green Deal (EGD) 2019	The deal sets out how to make Europe the first climate-neutral continent by 2050, boosting the economy, improving people's quality of life, caring for nature and leaving no one behind.	<ul style="list-style-type: none"> • It sets out a roadmap with actions to boost the efficient use of resources by moving to a clean, circular economy, restore biodiversity and cut pollution. • It outlines investments required, financing tools available and explains how to ensure a just and inclusive transition. • In order to meet the goal to become climate neutral by 2050 as part of the European Green Deal, the European Union (EU) Commission proposed on 4th March 2020 to bring about the first European Climate Law and legally bind the target of net zero greenhouse gas emissions by 2050. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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.
EU (2018) Clean Air Policy Package	Aims to substantially reduce air pollution across the EU.	The proposed strategy sets out objectives for reducing the health and environmental impacts of air pollution by 2030, and contains legislative proposals to implement stricter standards for emissions and air pollution.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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.
National Level			
Ireland 2040 - Our Plan, the National Planning Framework, (replacing the National Spatial Strategy 2002-2020) and the National Development Plan (2021-2030)	<ul style="list-style-type: none"> • The National Planning Framework is the Government's high-level strategic plan for shaping the future growth and development up 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: <ol style="list-style-type: none"> 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 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.
Planning, Land Use and Transport Outlook 2040 [in preparation]	The PLUTO will take account of forecasted future economic and demographic scenarios, affordability considerations and relevant Government policies and will: <ol style="list-style-type: none"> 1. Quantify in broad terms the appropriate scale of financial investment in land transport over the long term; 	In preparation	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to

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	<ul style="list-style-type: none"> 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. 		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)	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Development, with certain exceptions, is subject to development control under the Planning Acts and the local authorities grant or refuse planning permission for development, including ones within protected areas. There are, however, a range of exemptions from the planning system. Use of land for agriculture, peat extraction and afforestation, subject to certain thresholds, is generally exempt from the requirement to obtain planning permission. 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. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 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 Assessment of Certain Plans and Programmes Regulations 2004 (S.I. 435 of 2004), as amended by S.I. 200 of 2011	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The Regulations cover plans and programmes in all of the sectors listed in article 3(2) of the Directive except land-use planning. These Regulations also amend certain provisions of the Planning and Development Act 2000 to provide the statutory basis for the transposition of the Directive in respect of land-use planning. Transposition in respect of the land-use planning sector is contained in the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. No. 436 of 2004). 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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.
European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2011, as amended)	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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 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.
Waste Management Act 1996, as amended	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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 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.

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European Communities Environmental Objectives (FPM) Regulations 2009 (S.I. 296 of 2009)	<ul style="list-style-type: none"> The purpose of these Regulations is to support the achievement of favourable conservation status for freshwater pearl mussels 	<ul style="list-style-type: none"> 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 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.
European Communities Environmental Objectives (Groundwater) Regulations 2010 (S.I. 9 of 2010), as amended (S.I. No. 366 of 2016)	<ul style="list-style-type: none"> 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. 	<p>The substances and threshold values set out in Schedule 5 to S.I. No. 9 of 2010 have been reviewed and amended where necessary, based on existing monitoring information and international guidelines on appropriate threshold values.</p> <ul style="list-style-type: none"> 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 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.
European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2014 (S.I. No. 31 of 2014)	<ul style="list-style-type: none"> These Regulations, which give effect to Ireland's 3rd Nitrates Action Programme, provide statutory support for good agricultural practice to protect waters against pollution from agricultural sources 	<p>The Regulations include measures such as:</p> <ul style="list-style-type: none"> 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 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.
Climate Action and Low Carbon Development Act 2015	<ul style="list-style-type: none"> 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. 	<p>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:</p> <ul style="list-style-type: none"> 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 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.
The Sustainable Development Goals National Implementation Plan (2018 – 2020)	<ul style="list-style-type: none"> National Implementation Plan 2018 - 2020 is in direct response to the 2030 Agenda for Sustainable Development and provides 	<p>The Plan identifies four strategic priorities to guide implementation:</p> <ul style="list-style-type: none"> 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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	<p>a whole-of-government approach to implement the 17 Sustainable Development Goals (SDGs).</p> <ul style="list-style-type: none"> The Plan provides an 'SDG Matrix' which identifies the responsible Government Departments for each of the 169 targets. It also includes an 'SDG Policy Map' indicating the relevant national policies for each of the targets. 	<ul style="list-style-type: none"> 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. 	<p>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.</p>
Infrastructure and Capital Investment Plan (2016-2021)	<ul style="list-style-type: none"> €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. 	<ul style="list-style-type: none"> 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 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.</p>
European Union (Birds and Natural Habitats) (Sea-Fisheries) Regulations 2013 (S.I. 290 of 2013)	<p>These regulations have been drafted to implement the responsibilities of the Minister for Agriculture Food and the Marine in relation to sea fisheries in European sites, in accordance with the Habitats and Birds Directives as transposed by the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2011).</p>	<ul style="list-style-type: none"> 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 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.</p>
Ireland's National Renewable Energy Action Plan 2010 (Irish Government submission to the European Commission)	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 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.</p>
Strategy for Renewable Energy (2012-2020)	<ul style="list-style-type: none"> The Government's overarching strategic objective is to make renewable energy an increasingly significant component of Ireland's energy supply by 2020, so that at a minimum it will achieve its legally binding 2020 target in the most cost-efficient manner for consumers. 	<p>This document sets out five strategic goals, reflecting the key dimensions of the renewable energy challenge to 2020:</p> <ul style="list-style-type: none"> Increasing on and offshore wind, Building a sustainable bioenergy sector, Fostering R&D in renewables such as wave & tidal, 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to</p>

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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Growing sustainable transport; and Building out robust and efficient networks. 	comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Policy Position on Climate Action and Low Carbon Development (2014)	<ul style="list-style-type: none"> The National Policy Position provides a high-level policy direction for the adoption and implementation by Government of plans to enable the State to move to a low carbon economy by 2050. Statutory authority for the plans is set out in the Climate Action and Low Carbon Development Act 2015. 	<p>National climate policy in Ireland:</p> <ul style="list-style-type: none"> Recognises the threat of climate change for humanity; Anticipates and supports mobilisation of a comprehensive international response to climate change, and global transition to a low-carbon future; Recognises the challenges and opportunities of the broad transition agenda for society; and Aims, as a fundamental national objective, to achieve transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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.
National Clean Air Strategy [in preparation]	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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 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.
EirGrid's Grid25 Strategy and associated Grid25 Implementation Programme 2017-2022	<ul style="list-style-type: none"> EirGrid's mission is to develop, maintain and operate a safe, secure, reliable, economical and efficient transmission system for Ireland: <i>"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."</i> 	<ul style="list-style-type: none"> 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 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.
All Island Grid Study 2008	<ul style="list-style-type: none"> The All Island Grid Study is the first comprehensive assessment of the ability of the electrical power system and, as part of that, the transmission network ("the grid") on the island of Ireland to absorb large amounts of electricity produced from renewable energy sources. The objective of this five-part study is to assess the technical feasibility and the relative costs and benefits associated with various scenarios for increased shares of electricity sourced from renewable energy in the all island power system. 	<p>Key conclusions of the study:</p> <ul style="list-style-type: none"> The presented results indicate that the differences in cost between the highest cost and the lowest cost portfolios are low (7%), given the assumptions made and costs included in the Study. All but the high coal-based portfolio lead to significant reductions of CO2 emissions compared to portfolio 1 All but the high coal-based portfolio lead to reductions on the dependency of the all island system on fuel and electricity imports. The limitations of the study may overstate the technical feasibility of the portfolios analysed and could impact the costs and benefits resulting. Further work is required to understand the extent of such impact. Timely development of the transmission networks, requiring means to address the planning challenge, is a precondition for implementation of the portfolios considered. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 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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		<ul style="list-style-type: none"> Market mechanisms must facilitate the installation of complementary, i.e. flexible, dispatchable plant, so as to maintain adequate levels of system security. 	
Strategy for the Future Development of National and Regional Greenways (2018)	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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 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.
National Water Resources Plan [in preparation]	<ul style="list-style-type: none"> The NWRP is a plan on how to provide a safe, secure and reliable water supply to customers for the next 25 years, without causing adverse impact on the environment. The objective of the NWRP is to set out how we intend to maintain the supply and demand for drinking water over the short, medium and long term whilst minimising the impact on the environment. 	<p>The key objectives of the plan are to:</p> <ul style="list-style-type: none"> Identify areas where there are current and future potential water supply shortfalls, taking into account normal and extreme weather conditions Assess the current and future water demand from homes, businesses, farms, and industry Consider the impacts of climate change on Ireland's water resources Develop a drought plan advising measures to be taken before and during drought events Develop a plan detailing how we deal with the material that is produced as a result of treating drinking water Identify, develop and assess options to help meet potential shortfalls in water supplies Assess the water resources available at a national level including lakes, rivers and groundwater 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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.
National Strategic Plan for Aquaculture Development (2014-2020)	<i>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."</i>	<p>General development and growth objectives of marine and freshwater aquaculture (2014 – 2020):</p> <ul style="list-style-type: none"> 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 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.
Construction 2020, A Strategy for a Renewed Construction Sector	<ul style="list-style-type: none"> 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. 	<p>This Strategy therefore addresses issues including:</p> <ul style="list-style-type: none"> 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 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.

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Sustainable Development: A Strategy for Ireland (1997)	<ul style="list-style-type: none"> The overall aim of this Strategy is to ensure that economy and society in Ireland can develop to their full potential within a well-protected environment, without compromising the quality of that environment, and with responsibility towards present and future generations and the wider international community. 	<ul style="list-style-type: none"> The Strategy addresses all areas of Government policy, and of economic and societal activity, which impact on the environment. It seeks to re-orientate policies as necessary to ensure that the strong growth Ireland enjoys and seeks to maintain will be environmentally sustainable. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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.
National Landscape Strategy for Ireland 2015-2025 and National Landscape Character Assessment (pending preparation)	<ul style="list-style-type: none"> 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: <i>“Our landscape reflects and embodies our cultural values and our shared natural heritage and contributes to the well-being of our society, environment and economy. We have an obligation to ourselves and to future generations to promote its sustainable protection, management and planning.”</i> 	<p>The objectives of the National Landscape Strategy are to:</p> <ul style="list-style-type: none"> Implement the European Landscape Convention by integrating landscape into the approach to sustainable development; Establish and embed a public process of gathering, sharing and interpreting scientific, technical and cultural information in order to carry out evidence-based identification and description of the character, resources and processes of the landscape; Provide a policy framework, which will put in place measures at national, sectoral - including agriculture, tourism, energy, transport and marine - and local level, together with civil society, to protect, manage and properly plan through high quality design for the sustainable stewardship of the landscape; Ensure that we take advantage of opportunities to implement policies relating to landscape use that are complementary and mutually reinforcing and that conflicting policy objectives are avoided in as far as possible. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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.
National Hazardous Waste Management Plan (EPA) 2014-2020	<p>This Plan sets out the priorities to be pursued over the next six years and beyond to improve the management of hazardous waste, taking into account the progress made since the previous plan and the waste policy and legislative changes that have occurred since the previous plan was published. Section 26 of the Waste Management Act 1996 as amended, sets out the overarching objectives for the National Hazardous Waste Management Plan. In this context, the following objectives are included as priorities for the revised Plan period:</p> <ul style="list-style-type: none"> 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. 	<p>The revised Plan makes 27 recommendations under the following topics:</p> <ul style="list-style-type: none"> Prevention Collection Self-sufficiency Regulation Legacy issues North-south cooperation Guidance and awareness Implementation 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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.
Ministerial Guidelines such as Sustainable Rural Housing Guidelines and Flood Risk Management Guidelines	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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 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.

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HSE Healthy Ireland Framework for Improved Health and Wellbeing 2013-2025	<ul style="list-style-type: none"> The vision is: <i>"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."</i> 	<p>These four goals are interlinked, interdependent and mutually supportive:</p> <ul style="list-style-type: none"> 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 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.
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.	<ul style="list-style-type: none"> 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 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.
Smarter Travel – A Sustainable Transport Future – A New Transport Policy for Ireland 2009 – 2020 (2009)	<ul style="list-style-type: none"> Outlines a policy for how a sustainable travel and transport system can be achieved. Sets out five key goals: <ul style="list-style-type: none"> To reduce overall travel demand. To maximise the efficiency of the transport network. To reduce reliance on fossil fuels. To reduce transport emissions. To improve accessibility to transport. 	<ul style="list-style-type: none"> Others lower level aims include: <ul style="list-style-type: none"> 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 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.
Investing in our Future: A Strategic Framework for Investment in Land Transport (SFILT) – Department of Transport, Tourism and Sport	<ul style="list-style-type: none"> 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. 	<p>The three priorities stated in SFILT are:</p> <ul style="list-style-type: none"> 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. <p>In delivering on the steady state maintenance objective set out in SFILT, the Plan includes for:</p> <ul style="list-style-type: none"> 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's 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 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.
Delivering a Sustainable Energy Future for Ireland – The Energy Policy Framework 2007 – 2020 (2007)	<ul style="list-style-type: none"> White paper setting out a framework for delivering a sustainable energy future in Ireland. Outlines strategic Goals for: <ul style="list-style-type: none"> Security of Supply Sustainability of Energy Competitiveness of Energy Supply 	<p>The underpinning Strategic Goals are:</p> <ul style="list-style-type: none"> 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 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 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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		<ul style="list-style-type: none"> Being prepared for energy supply disruptions 	<p>– 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.</p>
National Adaptation Framework (NAF) 2018 and associated regional, local and sectoral adaptation plans	<ul style="list-style-type: none"> NAF specifies the national strategy for the application of adaptation measures in different sectors and by local authorities in their administrative areas in order to reduce the vulnerability of the State to the negative effects of climate change and to avail of any positive effects that may occur 	<ul style="list-style-type: none"> 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 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 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.</p>
Governments White Paper 'Ireland's Transition to a Low Carbon Energy Future' (2015 – 2030)	The White Paper sets out a vision and a framework to guide Irish energy policy between now and 2030. A complete energy policy update informed by the vision to transform Ireland into a low carbon society and economy by 2050.	<p>2030 will represent a significant milestone, meaning:</p> <ul style="list-style-type: none"> Reduced GHG emissions from the energy sector by between 80% and 95% Ensuring that secure supplies of competitive and affordable energy remain available to citizens and businesses. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 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.</p>
National Renewable Energy Action Plan (2010)	<ul style="list-style-type: none"> 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.	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 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.</p>
National Energy Efficiency Action Plan for Ireland (2009 – 2020)	<ul style="list-style-type: none"> This is the second National Energy Efficiency Action Plan for Ireland. 	<ul style="list-style-type: none"> The Plan reviews the original 90 actions outlined in the first Plan and updates/renews/removes them as appropriate. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 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.</p>
Wildlife Act of 1976 Wildlife (Amendment) Act, 2000	<ul style="list-style-type: none"> The act provides protection and conservation of wild flora and fauna. 	<ul style="list-style-type: none"> 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 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to</p>

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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.
Actions for Biodiversity (2017-2021) Ireland's National Biodiversity Plan	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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 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.
National Broadband Plan (2012)	<ul style="list-style-type: none"> Sets out the strategy to deliver high speed broadband throughout Ireland. 	<p>The Plan sets out:</p> <ul style="list-style-type: none"> 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 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.
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)	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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 environmental objectives to be achieved for surface water bodies. 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 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.
European Communities Environmental Objectives (Groundwater) Regulations of 2010 (SI 9 of 2010)	<ul style="list-style-type: none"> Transpose the requirements of the Groundwater Directive 2006/118/EC into Irish Legislation. 	<ul style="list-style-type: none"> 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 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

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Water Pollution Acts 1977 to 1990	<ul style="list-style-type: none"> The Water Pollution Acts allow Local Authorities the authority regulate and supervise actions relating to water in their division. 	<p>The Water Pollution Acts enable local authorities to:</p> <ul style="list-style-type: none"> 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. 	<p>objectives of the regulatory framework for environmental protection and management.</p> <p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 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.</p>
Water Services Act 2007 Water Services (Amendment) Act 2012 Water Services Act (No. 2) 2013	<ul style="list-style-type: none"> 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. 	<p>Key strategic objectives include:</p> <ul style="list-style-type: none"> 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. Promoting water conservation through Irish Water's Capital Investment Plan, the Rural Water Programme and other measures. Monitoring the on-going implementation of septic tanks inspection regime and the National Inspection Plan for Domestic Waste Water Treatment Systems. Ensuring a fair funding model to deliver water services. Overseeing the establishment of an economic regulation function under the CER. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 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.</p>
Irish Water's Water Services Strategic Plan 2015 and associated Proposed Capital Investment Plan (2014-2016)	<ul style="list-style-type: none"> 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. 	<p>Six strategic objectives as follows:</p> <ul style="list-style-type: none"> Meet Customer Expectations. Ensure a Safe and Reliable Water Supply. Provide Effective Management of Waste water. Protect and Enhance the Environment. Support Social and Economic Growth. Invest in the Future. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 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.</p>
Raised Bog SAC Management Plan and Review of Raised Bog Natural Heritage Areas	<ul style="list-style-type: none"> Aims to meet nature conservation obligations while having regard to national and local economic, social and cultural needs 	<ul style="list-style-type: none"> Ensure that the implications of management choices for water levels, quantity and quality are fully explored, understood and factored into policy making and land use planning. Review the current raised bog NHA network in terms of its contribution to the national conservation objective for raised bog habitats and determine the most suitable sites to replace the losses of active raised bog habitat and high bog areas within the SAC network and to enhance the national network of NHAs. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 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</p>

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			objectives of the regulatory framework for environmental protection and management.
Food Harvest 2020	<ul style="list-style-type: none"> Food Harvest 2020 is a roadmap for the Irish food industry, as it seeks to innovate and expand in response to increased global demand for quality foods. It sets out a vision for the potential growth in agricultural output after the removal of milk quotas. 	<ul style="list-style-type: none"> Seeks for the improvement of all agricultural sectors at all levels in terms of sustainability, environmental consideration and marketing 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 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.
Agri-vision 2015 Action Plan	Outlines the vision for agricultural industry to improve competitiveness and response to market demand while respecting and enhancing the environment	not applicable	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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 Scheme (REPS) Agri-Environmental Options Scheme (AEOS) Green, Low-Carbon, Agri-environment Scheme (GLAS)	<ul style="list-style-type: none"> Agri-environmental funding schemes aimed at rural development for the environmental enhancement and protection. GLAS is the new replacement for REPS and AEOS which are both expiring. 	<ul style="list-style-type: none"> Establish best practice farming methods and production methods in order to protect landscapes and maximise conservation. Protect biodiversity, endangered species of flora and fauna and wildlife habitats. Ensure food is produced with the highest regard to the environment. Implement nutrient management plans and grassland management plans. Protect and maintain water bodies, wetlands and cultural heritage. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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.
National Rural Development Programme	<ul style="list-style-type: none"> The National Rural Development Programme, prepared by the Department of Agriculture, Fisheries and Food, sets out a national programme based on the EU framework for rural development and prioritises improving the competitiveness of agriculture, improving the environment and improving the quality of life in rural areas 	<p>At a more detailed level, the programme also:</p> <ul style="list-style-type: none"> Supports structural change at farm level including training young farmers and encouraging early retirement, support for restructuring, development and innovation; Aims to improve the environment, biodiversity and the amenity value of the countryside by support for land management through funds such as Natura 2000 payments etc.; and Aims to improve quality of life in rural areas and encouraging diversification of economic activity through the implementation of local development strategies such as non-agricultural activities 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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.
National Forestry Programme (2014-2020)	<ul style="list-style-type: none"> Represents Ireland's proposals for 100% State aid funding for a new Forestry Programme for the period 2014 – 2020. 	<p>Measures include the following:</p> <ul style="list-style-type: none"> Afforestation and Creation of Woodland NeighbourWood Scheme Forest Roads Reconstitution Scheme Woodland Improvement Scheme Native Woodland Conservation Scheme 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to 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
		<ul style="list-style-type: none"> Knowledge Transfer and Information Actions Producer Groups Innovative Forest Technology Forest Genetic Reproductive Material Forest Management Plans 	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	<ul style="list-style-type: none"> River Basin Management Plans set out the measures planned to maintain and improve the status of waters. 	<ul style="list-style-type: none"> Aim to protect and enhance all water bodies in the RBD and meet the environmental objectives outlined in Article 4 of the Water Framework Directive. Identify and manages water bodies in the RBD. Establish a programme of measures for monitoring and improving water quality in the RBD. Involve the public through consultations. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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.
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.	<p>Objectives of the Strategy:</p> <ul style="list-style-type: none"> To give direction to Ireland's approach to peatland management. To apply to all peatlands, including peat soils. To ensure that the relevant State authorities and state-owned companies that influence such decisions contribute to meeting cross-cutting objectives and obligations in their policies and actions. To ensure that Ireland's peatlands are sustainably managed so that their benefits can be enjoyed responsibly. To inform appropriate regulatory systems to facilitate good decision making in support of responsible use. To inform the provision of appropriate incentives, financial supports and disincentives where required. To provide a framework for determining and ensuring the most appropriate future use of cutover and cutaway bogs. <p>To ensure that specific actions necessary for the achievement of its objectives are clearly identified and delivered by those involved in or responsible for peatlands management or for decisions affecting their management.</p>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 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	<ul style="list-style-type: none"> 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 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.
Draft National Bioenergy Plan 2014 - 2020	<p>The Draft Bioenergy Plan sets out a vision as follows:</p> <ul style="list-style-type: none"> 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. 	<p>Three high level goals, of equal importance, based on the concept of sustainable development are identified:</p> <ul style="list-style-type: none"> 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 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.

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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 Renewable Electricity Policy and Development Framework (DCCAE) 2016	Goal: To optimise the opportunities in Ireland for renewable electricity development on land at significant scale, to serve both the All Island Single Electricity Market and any future regional market within the European Union, in accordance with European and Irish law, including Directive 2009/28/EC: On the promotion of the use of energy from renewable resources.	Objective: To develop a Policy and Development Framework for renewable electricity generation on land to serve both the All Island Single Electricity Market and any future regional market within the European Union, with particular focus on large scale projects for indigenous renewable electricity generation. This will, inter alia, provide guidance for planning authorities and An Bord Pleanála.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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.
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: <ul style="list-style-type: none"> • 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 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.
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: <ul style="list-style-type: none"> • 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 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.
National Cycle Network Scoping Study 2010	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 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.
National Policy Framework for Alternative Fuels Infrastructure for Transport in Ireland 2017 to 2030	<ul style="list-style-type: none"> • 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. 	<p>This policy set out to achieve five key goals in transport:</p> <ul style="list-style-type: none"> • Reduce overall travel demand • Maximise the efficiency of the transport network • Reduce reliance on fossil fuels • Reduce transport emissions • Improve accessibility to transport <p>These goals remain the cornerstone of transport policy and are fully aligned to the objectives of this National Policy Framework.</p>	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 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.
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: <ul style="list-style-type: none"> • 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 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.
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: <ul style="list-style-type: none"> • 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 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.
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 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.
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: <ul style="list-style-type: none"> • 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 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.
People Place and Policy - Growing Tourism to 2025, (DTTAS, 2014)	Growing Tourism to 2025 is a policy framework for the development of tourism within the Country.	The framework establishes the overall tourism goal of Government; <ul style="list-style-type: none"> • Employment in the tourism sector will be 250,000 by 2025, compared with around 200,000 at present. • There will be 10 million visits to Ireland annually by 2025. The Government's ambition is that overseas tourism revenue will reach €5 billion in real terms by 2025.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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

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			– in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Waterways Ireland Heritage Plan 2016-2020	The overarching aim of the Plan is to: <i>“Identify and protect the unique waterways heritage and promote its sustainable use for the enjoyment of this and future generations”.</i>	Four objectives of the Plan include the following: <ul style="list-style-type: none"> • Objective 1: Fostering partnerships to continue building waterway heritage knowledge through storing information, undertaking research and developing best practice. • Objective 2: Promoting awareness, appreciation and enjoyment of our waterway heritage with a focus on community engagement. • Objective 3: Promoting the integrated management, conservation, protection and sustainable use of the inland navigable waterway asset. • Objective 4: To develop Waterways Ireland as a heritage organisation committed to achieving the aim of this 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 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.
Tourism Development and Innovation – A strategy for Investment 2016-2022, (Fáilte Ireland, 2016)	This strategy sets out the framework and mechanism for the delivery of investment to cities, towns, villages, communities and businesses across the country. It identifies priorities to support innovation in the sector to retain and grow the country's competitiveness in the marketplace. Its ultimate aim is to strengthen the appeal of Ireland for international visitors.	The objectives of the Tourism Development and Innovation Strategy are: <ul style="list-style-type: none"> • To successfully and consistently deliver a world class visitor experience; • To support a tourism sector that is profitable and achieves sustainable levels of growth and delivers jobs; • To facilitate communities to play an enhanced role in developing tourism in their locality, thereby strengthening and enriching local communities; and • To recognise, value and enhance Ireland's natural environment as the cornerstone of Irish tourism. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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.
Marine Planning Development Management Bill (General Scheme), 2019	The Bill seeks to establish in law a completely new regime for the maritime area which will replace existing State and development consent regimes and streamline arrangements on the basis of a single consent principle.	One of the aims is to establish a legal basis for An Bord Pleanála and coastal local authorities to consent to development in the maritime area, while retaining existing foreshore and planning permission provisions for aquaculture and sea fisheries related development. It will also provide for a single environmental impact assessment (EIA) and a single appropriate assessment (AA), where applicable.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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.
Aquaculture Acts 1997 to 2006 : (Sea-Fisheries and Maritime Jurisdiction Act 2006 (8/2006), s. 1(3)) Fisheries (Amendment) Act 1997 (23/1997) Fisheries and Foreshore (Amendment) Act 1998 (54/1998), ss. 2, 3 and 4 Fisheries (Amendment) Act 2001 (40/2001) Sea-Fisheries and Maritime Jurisdiction Act 2006 (8/2006)	The Aquaculture and Foreshore Management Division ensures the efficient and effective management of Aquaculture licensing and Foreshore licensing in respect of Aquaculture and Sea Fishery related activities.	The Strategic Objectives of the Aquaculture and Foreshore Management Division are: <ul style="list-style-type: none"> • to develop and manage an efficient and effective regulatory framework in respect of Aquaculture licensing and Foreshore licensing of Aquaculture and Sea Fishery related activities; • to secure a fair financial return from the State's foreshore estate in the context of Aquaculture licensing and Foreshore licensing in respect of Aquaculture and Sea Fishery related activities; to progressively reduce arrears in the clearing of licence applications.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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.
Foreshore Acts 1933 to 2011	The Foreshore Acts require that a lease or licence must be obtained from the Minister for Housing, Planning and Local Government for the carrying out of works or placing structures or material on, or for the occupation of or removal of material from, State-owned	<ul style="list-style-type: none"> • Developments on the foreshore require planning permission in addition to a Foreshore Lease/Licence/Permission. All Foreshore Leases, Licences 	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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	foreshore, which represents the greater part of the foreshore. Construction of permanent structures on privately owned foreshore also required the prior permission of the Minister under the Foreshore Act.	<ul style="list-style-type: none"> Permissions are without prejudice to the powers of the local planning authority. Applicants should, therefore, consult initially with the local planning authority regarding their proposal. In the case of developments on foreshore for, by or on behalf of a Local Authority where an EIS is required, applications should be made to An Bord Pleanála under Part XV, Planning and Development Act 2000. 	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.
National Seafood Operational Programme (2014-2020)	<p>The Operational Programme (OP) supported by the European Maritime and Fisheries Fund (EMFF) in Ireland aims at achieving key national development priorities along with the EU's "Europe 2020" objectives. The OP supports the general reform of the EU's Common Fisheries Policy (CFP) and the development of its Integrated Maritime Policy (IMP) in Ireland.</p> <p>The OP strategy is designed around the Irish national priorities in the agri-food sector: 'Act Smart' by encouraging knowledge and innovation, 'Think Green' through a responsible and sustainable use of resources, 'Achieve Growth' in order to maintain and create jobs.</p>	<p>The Irish OP is organised around the following priorities</p> <ul style="list-style-type: none"> Union Priority 1 (UP1): €67 million (28% of the total allocation) aim at assuring the sustainable development of fishing activities, while protecting the marine environment. Union Priority 2 (UP2): €30 million (12% of the total allocation) will support the Irish National Strategic Plan for Aquaculture that aims at boosting the competitiveness of the aquaculture sector. Union Priority 3 (UP3): €84.8 million (35.4% of the total allocation) will go towards compliance with CFP rules regarding control and data collection. Union Priority 4 (UP4): €12 million (5% of the total allocation) will support local development initiatives — a substantial, eleven-fold increase compared to the 2007-2013 funding period. Union Priority 5 (UP5): €33 million (13.8% of the total allocation) will go towards creating scale in the Irish marketing and processing sectors, starting from the base of very small-scale businesses. Union Priority 6 (UP6): €10.6 million (4% of the total allocation) will be used on measures to improve the knowledge on the state of the marine environment and the level of protection of marine 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 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.
Harnessing Our Ocean Wealth: An Integrated Marine Plan for Ireland 2012	Harnessing Our Ocean Wealth is an Integrated Marine Plan (IMP), setting out a roadmap for the Government's vision, high-level goals and integrated actions across policy, governance and business to enable our marine potential to be realised. Implementation of this Plan will see Ireland evolve an integrated system of policy and programme planning for our marine affairs.	<ul style="list-style-type: none"> Sustainable economic growth of marine/ maritime sectors; Increase the contribution to the national GDP; Deliver a business friendly yet robust governance, policy and planning framework; Protect and conserve our rich marine biodiversity and ecosystems; Manage our living and non-living resources in harmony with the ecosystem; Implement and comply with environmental legislation; Building on our maritime heritage, strengthen our maritime identity; Increase our awareness of the value, opportunities and societal benefits; and Engagement and participation by all. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 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 Eastern and Midlands Region in order to support the implementation of the National Planning Framework.	The Eastern and Midland Regional Economic and Spatial Strategy includes provisions for its 12 constituent local authorities: Fingal County Council; Dublin City Council; South Dublin County Council; Dún Laoghaire-Rathdown County Council; Louth County Council; Kildare County Council; Meath County Council; Wicklow County Council; Longford County Council; Laois County Council; Offaly County Council; and Westmeath County Council.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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.
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	<p>The Implementation Plan identifies investment proposals for a number of areas including:</p> <ul style="list-style-type: none"> Bus Light Rail; Heavy Rai; 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	the objectives and priorities set out in the Transport Strategy, focused on improving public and sustainable transport.	<ul style="list-style-type: none"> Integration Measures and Sustainable Transport Investment; Integrated Service Plan; and Integration and Accessibility. 	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 (2016-2035)	<ul style="list-style-type: none"> This Strategy sets out how transport will be developed across the Greater Dublin Area, covering Dublin, Meath, Wicklow and Kildare. Vision Statement: "The GDA by 2022 is an economically vibrant, active and sustainable international Gateway Region, with strong connectivity across the GDA Region, nationally and worldwide; a region which fosters communities living in attractive, accessible places well supported by community infrastructure and enjoying high quality leisure facilities; and promotes and protects across the GDA green corridors, active agricultural lands and protected natural areas." Full SEA and Stage 2 AA have been undertaken on this Strategy. 	<p>Core principles deriving from the strategic vision:</p> <ul style="list-style-type: none"> Dublin as the capital city of Ireland and a major European centre shall grow and progress, competing with other cities in the EU, and serving a wide range of international, national, regional and local needs. The Dublin and Mid-East Regions will be attractive, vibrant locations for industry, commerce, recreation and tourism and will be a major focus for economic growth within the Country. The GDA, through its ports and airport connections will continue to be the most important entry/exit point for the country as a whole, and as a Gateway between the European Union and the rest of the World. Access to and through the GDA will continue to be a matter of national importance. Development in the GDA shall be directly related to investment in integrated high-quality public transport services and focused on compact urban form. Development within the existing urban footprint of the Metropolitan Area will be consolidated to achieve a more compact urban form 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. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 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 Cycle Network Plan	<ul style="list-style-type: none"> Ensure that the quality of waters covered by the plan is maintained. Maintain and improve the quantity and quality of water included in the Plan scope. 	<p>Aims to identify and determine:</p> <ul style="list-style-type: none"> 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. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 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	<p>Management planning for nature conservation sites has a number of aims. These include:</p> <ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 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.
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.	<ul style="list-style-type: none"> 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 in-combination effects (see Section 8.2) may arise. Implementation of the Plan needs to

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
			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 2016-2021	The overarching vision for each LECP is: “to promote the well-being and quality of life of citizens and communities	<ul style="list-style-type: none"> 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 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.
Land Use Plans in force within Dún Laoghaire-Rathdown and in other adjoining planning authorities. This includes Development Plans¹²⁰, Local Area Plans¹²¹ and Planning Schemes¹²²	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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 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.
Dún Laoghaire-Rathdown Biodiversity Plan 2009-2013	Aims to protect, conserve, enhance and restore heritage, biodiversity and ecosystem services across all spectrums.	<p>Plan's objectives include:</p> <ul style="list-style-type: none"> gathering information on the biodiversity resource managing the resource education and awareness cooperation to achieve 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 in-combination effects (see Section 8.2) may arise. Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 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.	<p>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:</p> <ul style="list-style-type: none"> Protect and Care for our trees 	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-

¹²⁰ Including Development Plans for Counties Wicklow and South Dublin.

¹²¹ Including Local Area Plans for Ballyogan and Environs and Stillorgan.

¹²² There is one Planning Scheme in force in the Plan area, for Cherrywood. The Scheme was approved in 2014 and has been amended since. The front-loading of significant transport and social infrastructure (parks and schools) outlined in the Planning Scheme will ensure that the area to which the Scheme relates will be transformed into a new vibrant community.

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		<ul style="list-style-type: none"> Plant more trees, in the right place Promote education and awareness of trees Cooperate and engage 	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.
Dún Laoghaire-Rathdown Heritage Plan 2013-2019	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 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.
County Dún Laoghaire-Rathdown Character Assessment	Characterises the geographical dimension of the landscape.	<ul style="list-style-type: none"> 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 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.
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.	<ul style="list-style-type: none"> 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 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.
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.	<p>The main purpose of Noise Action Plans is to:</p> <ul style="list-style-type: none"> 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 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.

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
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: <ul style="list-style-type: none"> • 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 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.
Dún Laoghaire-Rathdown Tourism Strategy and Marketing Plan 2017-2022	The Vision for Dún Laoghaire-Rathdown as a tourism destination is: <i>"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."</i>	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 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.
Fáilte Ireland Tourism plans, strategies, including those relating to the Ireland's Ancient East and Dublin: A Breath of Fresh Air/Come Here To Me Dublin brands	Fáilte Ireland's work includes preparing various plans and strategies for Ireland's Hidden Heartlands, the Wild Atlantic Way, Ireland's Ancient East and other brands and initiatives. These plans are subject to their own environmental assessment processes and any project arising is required to be consistent with and conform with the provisions of all adopted/approved Statutory Policies, Strategies, Plans and Programmes, including provisions for the protection and management of the environment.	Some of Fáilte Ireland's plans and strategies include various projects relating to land use and infrastructural development, including those relating to development of land or on land and the carrying out of land use activities. Many of these projects exist already while some are not currently in existence. The Statutory Policies, Strategies, Plans and Programmes that provide for different projects undergo a variety of environmental assessments. These assessments ensure that environmental effects are considered, including: those arising from new and intensified uses and activities; and those arising from various sectors such as tourism.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential 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.
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 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.

Appendix II SEA Screening Report for Proposed Material Alterations

STRATEGIC ENVIRONMENTAL ASSESSMENT SCREENING REPORT

FOR

PROPOSED MATERIAL ALTERATIONS

TO THE

**DRAFT DÚN LAOGHAIRE-RATHDOWN
COUNTY DEVELOPMENT PLAN 2022-2028**

for: Dún Laoghaire-Rathdown County Council

County Hall
Marine Road
Dún Laoghaire



by: CAAS Ltd.

1st Floor
24-26 Ormond Quay Upper
Dublin



NOVEMBER 2021

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Section 1 Introduction and Background

1.1 Introduction

This is the Strategic Environmental Assessment (SEA) Screening Report for the Proposed Material Alterations to the Draft Dún Laoghaire-Rathdown County Development Plan (CDP) 2022-2028.

SEA is the formal, systematic evaluation of the likely significant environmental effects of implementing a plan or programme, or alteration to a plan or programme, before a decision is made to adopt it. The SEA Directive¹ requires, inter alia, that SEA is undertaken for certain plans, programmes or alterations to these. Screening is the process for deciding whether a particular plan - or alteration to a plan -, other than those for which SEA is mandatory, would be likely to have significant environmental effects, and would thus warrant SEA.

The purpose of this report is to inform whether or not to undertake SEA on the Proposed Material Alterations to the Dún Laoghaire-Rathdown CDP. Requirements in relation to the screening of Proposed Material Alterations to CDPs are provided under Section 12 (7) of the Planning and Development Act 2000 as amended.

This report should be read in conjunction with the CDP and all other associated documents including the:

- Draft County Development Plan 2022-2028 Proposed Amendments to Draft Plan;
- Appropriate Assessment (AA) Natura Impact Report (including information on AA Screening) for Proposed Material Alterations to the Draft Dún Laoghaire-Rathdown CDP 2022-2028;
- SEA Environmental Report for the Draft Dún Laoghaire-Rathdown CDP 2022-2028; and
- AA Natura Impact Report for the Draft Dún Laoghaire-Rathdown CDP 2022-2028.

1.2 Process so far

The CDP has been progressed to date in compliance with Section 12 of the Planning and Development Act 2000 as amended.

SEA² was undertaken on and informed the CDP in order to comply with the SEA Directive and transposing Regulations – the SEA Environmental Report that accompanied the CDP on public display contains the findings of the assessment.

AA³ was also undertaken on the CDP (informing both the CDP and the SEA) in order to comply with the Habitats Directive and transposing Regulations. An AA Natura Impact Report was prepared that contains the findings of this assessment.

The CDP associated SEA and AA documents were placed on public display and submissions were invited. Submissions were responded to in a Chief Executive's Report and Elected Members decided upon Proposed Material Alterations to the CDP and these are the subject of this report.

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

² Strategic Environmental Assessment is the formal, systematic evaluation of the likely significant environmental effects of implementing a plan or programme, or alteration to a plan or programme, before a decision is made to adopt it.

³ Appropriate Assessment is an impact assessment process concerning European Sites designated on foot of habitats and species.

1.3 SEA Environmental Report (January 2021)

The SEA Environmental Report for the CDP contains the information specified in Annex I of the SEA Directive and Schedule 2B of the Planning and Development (SEA) Regulations 2004 (S.I. 436 of 2004) as amended by the Planning and Development (SEA) (Amendment) Regulations 2011 (S.I. 201 of 2011). The relevant sections of the SEA Environmental Report that address these information requirements are detailed on Table 1.1 below.

The assessment undertaken on relevant Proposed Material Alterations (the findings of which are presented later in this document) has used the information contained in the SEA Environmental Report.

Table 1.1 Information contained within the SEA Environmental Report that accompanies the County Development Plan

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 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 2 SEA Screening

2.1 Introduction

The section examines whether each Proposed Material Alteration to the CDP would be likely to have significant environmental effects (and thus would warrant the undertaking of SEA).

This examination takes account of relevant criteria set out in Schedule 2A '*Criteria for determining whether a plan is likely to have significant effects on the environment*' of the Planning and Development (SEA) Regulations, as amended, (see Section 2.5).

2.2 Strategic Flood Risk Assessment

SFRA is being undertaken to inform the preparation of the Draft Plan and the Proposed Material Alterations. The SFRA process has informed this report.

The SFRA has considered the Proposed Material Alterations and finds that all Proposed Material Alterations comply with "The Planning System and Flood Risk Management Guidelines for Planning Authorities" (DEHLG/OPW, 2009).

2.3 Appropriate Assessment

AA is an impact assessment process concerning *Natura 2000*, or *European*, sites - these sites have been designated or proposed for designation by virtue of their ecological importance. The Habitats Directive⁴, its transposing Birds and Natural Habitats Regulations 2011 (as amended) and the Planning and Development Act 2000 (as amended) provide the requirement to screen for effects on European Sites. If the effects are deemed to be *significant, potentially significant or uncertain* then Stage 2 AA must be undertaken.

The County Development Plan is being subject to Stage 2 AA and a Draft Natura Impact Report was placed on public display alongside the Draft Plan. At adoption of the Plan, the Natura Impact Report will be finalised and an AA determination made by the Council.

An AA screening process has been undertaken on the Proposed Material Alterations. This process has determined that Stage 2 AA for certain Alterations is necessary. An AA Natura Impact Report contains the findings of this assessment for the Proposed Material Alterations, has informed this SEA Screening Report and accompanies the Proposed Material Alterations.

2.4 Screening Analysis of Proposed Material Alterations

The analysis of Proposed Material Alterations is undertaken considering interactions Strategic Environmental Objectives (see Table 2.1). Table 2.2 examines whether each part of the Proposed Material Alterations would be likely to have significant environmental effects (and thus would warrant the undertaking of SEA).

Table 2.2 is supplemented by Table 2.3 which provides details on:

- The likely significant effects of implementing the Draft Plan, if unmitigated;
- Key mitigation measure(s) that are already contained within the Draft Plan; and
- Residual non-significant adverse effects arising from the Draft Plan.

⁴ Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora

Effects encompass the full range of effects⁵, including those arising cumulatively – such as those potentially arising as a result of interactions with other plans and programmes.

The examination of Proposed Material Alterations also takes into account relevant criteria set out in Schedule 2A '*Criteria for determining whether a plan is likely to have significant effects on the environment*' of the SEA Regulations, as amended, (see Section 2.5).

Table 2.1 Strategic Environmental Objectives

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives
Biodiversity, Flora and Fauna	BFF	No net contribution to biodiversity losses or deterioration	<ul style="list-style-type: none"> 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 the County's 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	<ul style="list-style-type: none"> 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 the County's citizens from environment-related pressures and risks to health and well-being
Soil (and Land)	S	Ensure the long-term sustainable management of land	<ul style="list-style-type: none"> 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 within the County Safeguard areas of prime agricultural land and designated geological sites
Water	W	Protection, improvement and sustainable management of the water resource	<ul style="list-style-type: none"> 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 that economic growth of the marine resource and its ecosystems are managed sustainably 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 development in areas at risk of flooding and areas that are vulnerable to current and future erosion, particularly coastal areas Integrate sustainable water management solutions (such as SuDS, porous surfacing and green roofs) into development proposals
Material Assets	MA	Sustainable and efficient use of natural resources	<ul style="list-style-type: none"> 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

⁵ These include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives
Air	A	Support clean air policies that reduce the impact of air pollution on the environment and public health	<ul style="list-style-type: none"> • 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 by 2020 and move closer to WHO recommended levels
Climatic Factors	C	Achieving transition to a competitive, low carbon, climate-resilient economy that is cognisant of environmental impacts	<ul style="list-style-type: none"> • To minimise emissions of greenhouse gasses • Integrate sustainable design solutions into the County's 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	CH	Safeguard cultural heritage features and their settings through responsible design and positioning of development	<ul style="list-style-type: none"> • Protect places, features, buildings and landscapes of cultural, archaeological or architectural heritage
Landscape	L	Protect and enhance the landscape character	<ul style="list-style-type: none"> • To implement the Plan's framework for identification, assessment, protection, management and planning of landscapes having regard to the European Landscape Convention

Table 2.2 SEA Screening Analysis of Proposed Material Alterations⁶

Ref	SEA Screening Consideration
1	This alteration would further contribute towards provisions related to this sector/topic that are already contained within the Draft Plan. Taking into account the measures that have been already integrated into the Draft Plan that provide for and contribute towards environmental protection, environmental management and sustainable development, it is determined that all potential effects arising from this Proposed Alteration: either are present already (beneficial) and will be further contributed towards; and/or will be mitigated so as not to be significant (adverse). Consequently, SEA is not required. Refer also to Table 2.3 and Section 2.5.
2	A future plan/assessment/feasibility study/ investigation of potential would not result in different environmental outcomes or effects. Consequently, SEA is not required. Was such an assessment to be followed by recommendations, such as varying the Plan, such recommendations would have to be subject to SEA and AA screening and other requirements as appropriate.
3	The update to terminology/language/wording/numbering/mapping would not change the effects arising from the Plan. Where the change relates to mapping, the implications of the change may have been considered under other related Alterations. As such, this alteration would not be considered as being likely to result in significant environmental effects. Consequently, SEA is not required.
4	This Proposed Alteration relates to Plan text that sets the context for, summarises and/or provides clarification to Plan provisions. It does not interact with existing Plan provisions to an extent that it would have additional significant environmental effects. Consequently, SEA is not required.
5	This amendment adds more detail but would not have the potential to result in significant environmental effects. Consequently, SEA is not required.
6	This Proposed Alteration provides consistency with other parts of the Plan and/or with the wider planning and policy framework. It would not interact with Plan provisions to the extent that it would have environmental effects. Consequently, SEA is not required.
7	Removal of this provision would remove the potential for any environmental effects; however, removal of the provision would not be likely to result in any environmental effects. Consequently, SEA is not required.
8	These changes relate to supporting documents but would not change Plan provisions. Consequently, SEA is not required.
9	Taking into account the measures that have been already integrated into the Draft Plan that provide for and contribute towards environmental protection, environmental management and sustainable development (including those measures to contribute towards the protection of European sites detailed as Section 5 of this report), there is no potential for effects on the integrity of any European site to arise from this Proposed Material Alteration. However, the AA screening process takes into account the need to undertake Stage 2 AA when mitigation is being proposed. As this alteration could be considered mitigation, in relation to the Plan elements that could potentially affect the integrity of European sites under the Plan, further to that already included in the Draft Plan (see Table 2.3), with the objective of protecting the integrity of European Sites brought to Stage 2 under the ongoing AA being undertaken alongside the preparation of the Plan, it would be prudent to undertake Stage 2 AA. Consequently, SEA is advised as prudent.
10	As this alteration could potentially impact upon the protection of a European site, Stage 2 AA is required. Consequently, SEA is advised as prudent.
11	This alteration would present additional and potentially significant adverse effects on various environmental components, including, for example, soil, water, non-designated habitats and species, air and climatic factors and material assets. Taking into account the above, SEA is required.
12	As this alteration could potentially significantly affect the protection of architectural heritage, SEA is required.

Alteration No.	SEA Screening Consideration Ref. – see above	Alteration No.	SEA Screening Consideration Ref. – see above	Alteration No.	SEA Screening Consideration Ref. – see above
1	Selection from Ref. 1 to 8 - SEA not required	162	Selection from Ref. 1 to 8 - SEA not required	323	Selection from Ref. 1 to 8 - SEA not required
2	Selection from Ref. 1 to 8 - SEA not required	163	Selection from Ref. 1 to 8 - SEA not required	324	Selection from Ref. 1 to 8 - SEA not required
3	Selection from Ref. 1 to 8 - SEA not required	164	Selection from Ref. 1 to 8 - SEA not required	325	Selection from Ref. 1 to 8 - SEA not required
4	Selection from Ref. 1 to 8 - SEA not required	165	Selection from Ref. 1 to 8 - SEA not required	326	Selection from Ref. 1 to 8 - SEA not required
5	Selection from Ref. 1 to 8 - SEA not required	166	Selection from Ref. 1 to 8 - SEA not required	327	Selection from Ref. 1 to 8 - SEA not required
6	Selection from Ref. 1 to 8 - SEA not required	167	Selection from Ref. 1 to 8 - SEA not required	328	Selection from Ref. 1 to 8 - SEA not required
7	Selection from Ref. 1 to 8 - SEA not required	168	Selection from Ref. 1 to 8 - SEA not required	329	Selection from Ref. 1 to 8 - SEA not required
8	Selection from Ref. 1 to 8 - SEA not required	169	Selection from Ref. 1 to 8 - SEA not required	330	Selection from Ref. 1 to 8 - SEA not required
9	Selection from Ref. 1 to 8 - SEA not required	170	Selection from Ref. 1 to 8 - SEA not required	331	Selection from Ref. 1 to 8 - SEA not required
10	Selection from Ref. 1 to 8 - SEA not required	171	Selection from Ref. 1 to 8 - SEA not required	332	Selection from Ref. 1 to 8 - SEA not required
11	Selection from Ref. 1 to 8 - SEA not required	172	Selection from Ref. 1 to 8 - SEA not required	333	Selection from Ref. 1 to 8 - SEA not required
12	Selection from Ref. 1 to 8 - SEA not required	173	Selection from Ref. 1 to 8 - SEA not required	334	Selection from Ref. 1 to 8 - SEA not required
13	Selection from Ref. 1 to 8 - SEA not required	174	Selection from Ref. 1 to 8 - SEA not required	335	Selection from Ref. 1 to 8 - SEA not required
14	Selection from Ref. 1 to 8 - SEA not required	175	Selection from Ref. 1 to 8 - SEA not required	336	Selection from Ref. 1 to 8 - SEA not required
15	Selection from Ref. 1 to 8 - SEA not required	176	Selection from Ref. 1 to 8 - SEA not required	337	Selection from Ref. 1 to 8 - SEA not required
16	Selection from Ref. 1 to 8 - SEA not required	177	Selection from Ref. 1 to 8 - SEA not required	338	Selection from Ref. 1 to 8 - SEA not required
17	Selection from Ref. 1 to 8 - SEA not required	178	Selection from Ref. 1 to 8 - SEA not required	339	Selection from Ref. 1 to 8 - SEA not required
18	Selection from Ref. 1 to 8 - SEA not required	179	Selection from Ref. 1 to 8 - SEA not required	340	Selection from Ref. 1 to 8 - SEA not required
19	Selection from Ref. 1 to 8 - SEA not required	180	Selection from Ref. 1 to 8 - SEA not required	341	Selection from Ref. 1 to 8 - SEA not required
20	Selection from Ref. 1 to 8 - SEA not required	181	Selection from Ref. 1 to 8 - SEA not required	342	Selection from Ref. 1 to 8 - SEA not required
21	Selection from Ref. 1 to 8 - SEA not required	182	Selection from Ref. 1 to 8 - SEA not required	343	Selection from Ref. 1 to 8 - SEA not required
22	Selection from Ref. 1 to 8 - SEA not required	183	Selection from Ref. 1 to 8 - SEA not required	344	Selection from Ref. 1 to 8 - SEA not required
23	Selection from Ref. 1 to 8 - SEA not required	184	Selection from Ref. 1 to 8 - SEA not required	345	Selection from Ref. 1 to 8 - SEA not required
24	Selection from Ref. 1 to 8 - SEA not required	185	Selection from Ref. 1 to 8 - SEA not required	346	Selection from Ref. 1 to 8 - SEA not required
25	Selection from Ref. 1 to 8 - SEA not required	186	Selection from Ref. 1 to 8 - SEA not required	347	Selection from Ref. 1 to 8 - SEA not required
26	Selection from Ref. 1 to 8 - SEA not required	187	Selection from Ref. 1 to 8 - SEA not required	348	Selection from Ref. 1 to 8 - SEA not required
27	Selection from Ref. 1 to 8 - SEA not required	188	Selection from Ref. 1 to 8 - SEA not required	349	Selection from Ref. 1 to 8 - SEA not required
28	Selection from Ref. 1 to 8 - SEA not required	189	Selection from Ref. 1 to 8 - SEA not required	350	Selection from Ref. 1 to 8 - SEA not required
29	Selection from Ref. 1 to 8 - SEA not required	190	Selection from Ref. 1 to 8 - SEA not required	351	Selection from Ref. 1 to 8 - SEA not required

⁶ For detail on Proposed Material Alterations please refer to Proposed Material Alterations document.

SEA Screening Report for Proposed Material Alterations

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SEA Screening Report for Proposed Material Alterations

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SEA Screening Report for Proposed Material Alterations

Alteration No.	SEA Screening Consideration Ref. – see above	Alteration No.	SEA Screening Consideration Ref. – see above	Alteration No.	SEA Screening Consideration Ref. – see above
130	Selection from Ref. 1 to 8 - SEA not required	291	Selection from Ref. 1 to 8 - SEA not required	452	Selection from Ref. 1 to 8 - SEA not required
131	Selection from Ref. 1 to 8 - SEA not required	292	Selection from Ref. 1 to 8 - SEA not required	453	Selection from Ref. 1 to 8 - SEA not required
132	Selection from Ref. 1 to 8 - SEA not required	293	Selection from Ref. 1 to 8 - SEA not required	454	Selection from Ref. 1 to 8 - SEA not required
133	Selection from Ref. 1 to 8 - SEA not required	294	Selection from Ref. 1 to 8 - SEA not required	455	Selection from Ref. 1 to 8 - SEA not required
134	Selection from Ref. 1 to 8 - SEA not required	295	Selection from Ref. 1 to 8 - SEA not required	456	Selection from Ref. 1 to 8 - SEA not required
135	Selection from Ref. 1 to 8 - SEA not required	296	Selection from Ref. 1 to 8 - SEA not required	457	Selection from Ref. 1 to 8 - SEA not required
136	Selection from Ref. 1 to 8 - SEA not required	297	Selection from Ref. 1 to 8 - SEA not required	458	Selection from Ref. 1 to 8 - SEA not required
137	Selection from Ref. 1 to 8 - SEA not required	298	Selection from Ref. 1 to 8 - SEA not required	459	Selection from Ref. 1 to 8 - SEA not required
138	Selection from Ref. 1 to 8 - SEA not required	299	Selection from Ref. 1 to 8 - SEA not required	460	Selection from Ref. 1 to 8 - SEA not required
139	Selection from Ref. 1 to 8 - SEA not required	300	Selection from Ref. 1 to 8 - SEA not required	461	Selection from Ref. 1 to 8 - SEA not required
140	Selection from Ref. 1 to 8 - SEA not required	301	Selection from Ref. 1 to 8 - SEA not required	462	Selection from Ref. 1 to 8 - SEA not required
141	Selection from Ref. 1 to 8 - SEA not required	302	Selection from Ref. 1 to 8 - SEA not required	463	Selection from Ref. 1 to 8 - SEA not required
142	Selection from Ref. 1 to 8 - SEA not required	303	Selection from Ref. 1 to 8 - SEA not required	464	Selection from Ref. 1 to 8 - SEA not required
143	Selection from Ref. 1 to 8 - SEA not required	304	Selection from Ref. 1 to 8 - SEA not required	465	Selection from Ref. 1 to 8 - SEA not required
144	Selection from Ref. 1 to 8 - SEA not required	305	Selection from Ref. 1 to 8 - SEA not required	466	Selection from Ref. 1 to 8 - SEA not required
145	Selection from Ref. 1 to 8 - SEA not required	306	In-combination with No. 208: Ref. 9	467	Selection from Ref. 1 to 8 - SEA not required
146	Selection from Ref. 1 to 8 - SEA not required	307	Selection from Ref. 1 to 8 - SEA not required	468	Selection from Ref. 1 to 8 - SEA not required
147	Selection from Ref. 1 to 8 - SEA not required	308	Selection from Ref. 1 to 8 - SEA not required	469	Selection from Ref. 1 to 8 - SEA not required
148	Selection from Ref. 1 to 8 - SEA not required	309	Selection from Ref. 1 to 8 - SEA not required	470	Selection from Ref. 1 to 8 - SEA not required
149	Selection from Ref. 1 to 8 - SEA not required	310	Selection from Ref. 1 to 8 - SEA not required	471	Selection from Ref. 1 to 8 - SEA not required
150	Selection from Ref. 1 to 8 - SEA not required	311	Selection from Ref. 1 to 8 - SEA not required	472	Selection from Ref. 1 to 8 - SEA not required
151	Selection from Ref. 1 to 8 - SEA not required	312	Selection from Ref. 1 to 8 - SEA not required	473	Selection from Ref. 1 to 8 - SEA not required
152	Selection from Ref. 1 to 8 - SEA not required	313	Selection from Ref. 1 to 8 - SEA not required	474	Selection from Ref. 1 to 8 - SEA not required
153	Selection from Ref. 1 to 8 - SEA not required	314	9,10,11 – see also Alteration No. 218	475	Selection from Ref. 1 to 8 - SEA not required
154	Selection from Ref. 1 to 8 - SEA not required	315	Selection from Ref. 1 to 8 - SEA not required	476	Selection from Ref. 1 to 8 - SEA not required
155	Selection from Ref. 1 to 8 - SEA not required	316	9, 10	477	Selection from Ref. 1 to 8 - SEA not required
156	Selection from Ref. 1 to 8 - SEA not required	317	Selection from Ref. 1 to 8 - SEA not required	478	Selection from Ref. 1 to 8 - SEA not required
157	Selection from Ref. 1 to 8 - SEA not required	318	Selection from Ref. 1 to 8 - SEA not required	479	Selection from Ref. 1 to 8 - SEA not required
158	Selection from Ref. 1 to 8 - SEA not required	319	Selection from Ref. 1 to 8 - SEA not required	480	Selection from Ref. 1 to 8 - SEA not required
159	Selection from Ref. 1 to 8 - SEA not required	320	Selection from Ref. 1 to 8 - SEA not required	481	Selection from Ref. 1 to 8 - SEA not required
160	Selection from Ref. 1 to 8 - SEA not required	321	Selection from Ref. 1 to 8 - SEA not required	482	Selection from Ref. 1 to 8 - SEA not required
161	Selection from Ref. 1 to 8 - SEA not required	322	Selection from Ref. 1 to 8 - SEA not required	483	Selection from Ref. 1 to 8 - SEA not required
Map No. 9 Mapping Amendment M911 - to add Strategic Land Reserve at Kiltiernan	10,11	Various Other Mapping Amendments	<p>Selection from Ref. 1 to 8 - SEA not required. The Material Alterations include various changes to the mapping that was included in the Draft Plan. Apart from the one Proposed Material Alteration relating to the addition of the Strategic Land Reserve at Kiltiernan (see Map No. 9 Mapping Amendment M911), the changes, alone and in combination with each other would not be likely to result in significant environmental effects.</p> <p>This includes the changing of land use zoning at the Central Bank Mint site (Map No. 5 Mapping Amendment M506 and M507). Although the proposed uses could potentially adversely impact upon the environment – the various provisions integrated into the Plan will ensure its appropriate protection and management at this previously developed site and beyond (see also Table 2.3 and Section 2.5).</p> <p>The assessment of takes into account the measures that have been already integrated into the Draft Plan that provide for and contribute towards environmental protection, environmental management and sustainable development. It is determined that all potential effects arising from these Proposed Material Alterations: either are present already (beneficial) and will be further contributed towards; and/or will be mitigated so as not to be significant (adverse). Consequently, SEA is not required for these Proposed Material Alterations. Refer also to Table 2.3 and Section 2.5.</p>		

Table 2.3 Detail of effects⁷, if unmitigated, mitigation measures for potential effects and residual adverse effects

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, adjacent Development Plans and lower-tier land use plans.			Mitigation including:	SEO Codes
	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non-Significant Effects		
All	<ul style="list-style-type: none"> All 	All	<ul style="list-style-type: none"> All 	Policy Objective T24: Environmental Assessment of New Roads Special Local Objective 107 Policy Objective GIB1: Green Infrastructure Strategy Policy Objective OSR7: Trees, Woodland and Forestry Policy Objective OSR8: Greenways and Blueways Network: Requirements under Chapter 12: Development Management	All
Biodiversity and Flora and Fauna	<ul style="list-style-type: none"> 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-served 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 long-established managed landscapes and the flora and fauna that they contain. 	Arising from both construction and operation of development and associated infrastructure: <ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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). 	Policy Objective CS8 – Ecosystem Services Approach Policy Objective T29: Street Lighting Policy Objective GIB7: National Marine Planning Framework (NMPF) Policy Objective GIB10: Dublin Bay Biosphere Policy Objective GIB11: Coastal Area Feasibility Study Policy Objective GIB18: Protection of Natural Heritage and the Environment Policy Objective GIB19: Habitats Directive Policy Objective GIB20: Biodiversity Plan Policy Objective GIB21: Designated Sites Policy Objective GIB22: Non-Designated Areas of Biodiversity Importance Policy Objective GIB23: County-Wide Ecological Network Policy Objective GIB24: Rivers and Waterways Policy Objective GIB25: Hedgerows Policy Objective GIB26: Geological Sites Policy Objective GIB27: Green Belts Policy Objective GIB28: Invasive Species Policy Objective GIB29: Nature Based Solutions Policy Objective E18: Groundwater Protection and Appropriate Assessment Policy Objective E17: Water Supply and Wastewater treatment and Appropriate Assessment Policy Objective OSR11: Water-Based Sports Policy Objective E11: Sustainable Management of Water Policy Objective E17: Water Supply and Wastewater treatment and Appropriate Assessment Policy Objective E18: Groundwater Protection and Appropriate Assessment Special Local Objective 35 Special Local Objective 115 Special Local Objective 116 Special Local Objective 117 Requirements under Chapter 12: Development Management, including those under the headings of: Construction Management Plan requirements under Plan Sections 12.9.4 to 12.9.6 References to the protection of European sites/Appropriate Assessment or the Habitats Directive in the detailed text under: <ul style="list-style-type: none"> Policy Objective T13: Coastal Cycling Infrastructure Objective Policy Objective T22: Roads and Streets Policy Objective GIB10: Dublin Bay Biosphere Policy Objective GIB18: Protection of Natural Heritage and the Environment Policy Objective GIB19: Habitats Directive Policy Objective GIB21: Designated Sites Policy Objective GIB23: County-Wide Ecological Network Policy Objective GIB24: Rivers and Waterways Policy Objective E13: Wastewater Treatment Systems Policy Objective E123: Flood Risk Management Policy Objective OSR8: Greenways and Blueways Network: Requirements under Chapter 13 Land Use Zoning Objectives, under the heading of Appropriate Assessment 	BFF

⁷ Environmental effects of implementing the Plan, including in combination with the wider planning framework e.g. the National Planning Framework and associated National Development Plan 2018, the Eastern and Midlands Regional Spatial and Economic Strategy, adjacent Development Plans and lower-tier land use plans.

SEA Screening Report for Proposed Material Alterations

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, adjacent Development Plans and lower-tier land use plans.			Mitigation including:	SEO Codes
	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non-Significant Effects		
Population and Human Health	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Potential adverse effects arising from flood events. Potential interactions if effects arising from environmental vectors. 	<ul style="list-style-type: none"> Potential interactions with residual effects on environmental vectors – please refer to residual adverse effects under "Soil", "Water" and "Air and Climatic Factors" below. 	Also see measures under other environmental components including Soil, Water and Air and Climatic Factors. Policy Objective T26: Traffic Noise Policy Objective EI15: Air and Noise Pollution Policy Objective EI16: Light Pollution Policy Objective EI17: Water Pollution Policy Objective EI18: Major Accidents	PHH
Soil	<ul style="list-style-type: none"> Contribution towards the protection of soils (including those used for agriculture) and designated sites of geological heritage 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 protection of the environment from contamination the highest standards of remediation, and where appropriate to consultations with the EPA and other relevant bodies, will be required to resolve any instances of environmental pollution created by contaminated land. 	<ul style="list-style-type: none"> Potential adverse effects on the hydrogeological and ecological function of the soil resource, including as a result of development on contaminated lands. Potential for riverbank and coastal erosion. 	<ul style="list-style-type: none"> Loss of an extent of soil function arising from the replacement of semi-natural land covers with artificial surfaces. Coastal and riverbank erosion will continue to occur naturally over time and is likely to be enhanced by climate change 	Also see measures under other environmental components including Water. Coastal Protection Policy Objective EI25: Coastal Defence 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.	S

SEA Screening Report for Proposed Material Alterations

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, adjacent Development Plans and lower-tier land use plans.			Mitigation including:	SEO Codes
	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non-Significant Effects		
Water	<ul style="list-style-type: none"> Contribution towards the protection of water 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-served 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. 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 	<p>Also see measures under other environmental components including Soil and Material Assets.</p> <p>Policy Objective EI5: River Basin Management Plans (RMBPs)</p> <p>Policy Objective EI8: Groundwater Protection and Appropriate Assessment</p> <p>Policy Objective EI11: Rathmichael Groundwater and Surface Water Protection</p> <p>Policy Objective EI17: Water Pollution</p> <p>Flood Risk</p> <p>Policy Objective EI22: Catchment Flood Risk Assessment and Management (CFRAM)</p> <p>Policy Objective EI23: Flood Risk Management</p> <p>Policy Objective EI24: Cross Boundary Flood Management</p>	W
Material Assets	<ul style="list-style-type: none"> 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-served 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. 	<ul style="list-style-type: none"> 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 interactions at local level between agricultural waste and soil, water, biodiversity and human health – including nitrogen deposition as a result of agricultural activities. However, this is likely to be a less significant issue at County level due to low levels of intensive agriculture. 	<ul style="list-style-type: none"> 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. 	<p>Also see measures under other environmental components including Population and Human Health, Cultural Heritage, Soil, Water, Air and various Land Use Zoning provisions from the Plan.</p> <p>Policy Objective T25: Traffic and Transport Assessments and Road Safety Audits</p> <p>Policy Objective T28: Traffic Management</p> <p>Policy Objective EI1: Sustainable Management of Water</p> <p>Policy Objective EI2: Irish Water Enabling Policies</p> <p>Policy Objective EI3: Wastewater Treatment Systems</p> <p>Policy Objective EI4: Water Drainage Systems</p> <p>Policy Objective EI6: Sustainable Drainage Systems</p> <p>Policy Objective EI7: Water Supply and Wastewater treatment and Appropriate Assessment</p> <p>Policy Objective EI9: Drainage Impact Assessment</p> <p>Policy Objective EI10: Storm Overflows of Sewage to Watercourses</p> <p>Policy Objective EI12: Resource Management</p> <p>Policy Objective EI13: Waste Management Infrastructure, Prevention, Reduction, Reuse and Recycling</p> <p>Policy Objective EI14: Hazardous Waste</p> <p>Construction Management Plan requirements under Plan Sections 12.9.4 to 12.9.6</p> <p>Various provisions under Chapter 6: Enterprise and Employment, including</p> <p>Policy Objective E17: Maritime Economy</p> <p>Policy Objective E18: Rural Development</p>	MA

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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, adjacent Development Plans and lower-tier land use plans.			Mitigation including:	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	<ul style="list-style-type: none"> 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-served 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: <ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Potential conflict between development under the Plan and aiming to reduce carbon emissions in line with local, national and European environmental objectives. 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. 	<ul style="list-style-type: none"> 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. 	<p>Also refer to: various sustainable mobility and transport provisions in Chapters 5 and 12 of the Plan and the overall approach to compact development and sustainability provided by the Plan</p> <p>Policy Objective CA1: National Climate Action Policy</p> <p>Policy Objective CA2: Regional Climate Action</p> <p>Policy Objective CA3: Measuring Greenhouse Gas Impacts</p> <p>Policy Objective CA4: Dún Laoghaire Rathdown County Council Climate Change Action Plan 2019-2024 (DLR CCAP)</p> <p>Policy Objective CA5: Energy Performance in Buildings</p> <p>Policy Objective CA6: Retrofit and Reuse of Buildings</p> <p>Policy Objective CA7: Construction Materials</p> <p>Policy Objective CA8: Sustainability in Adaptable Design</p> <p>Policy Objective CA9: Radon Gas</p> <p>Policy Objective CA10: Renewable Energy</p> <p>Policy Objective CA11: Onshore and Offshore Wind Energy and Wave Energy</p> <p>Policy Objective CA12: Small-Scale Wind Energy Schemes</p> <p>Policy Objective CA13: Solar Energy Infrastructure</p> <p>Policy Objective CA14: District Heating</p> <p>Policy Objective CA15: Low Emission Vehicles</p> <p>Policy Objective CA16: Electric Vehicles</p> <p>Policy Objective CA17: Urban Greening</p> <p>Policy Objective T26: Traffic Noise</p> <p>Policy Objective EI15: Air and Noise Pollution</p>	AC
Cultural Heritage	<ul style="list-style-type: none"> Contributes towards protection of cultural heritage elsewhere in the County by facilitating development within and adjacent to the County's existing built-up footprint. Contributes towards protection of cultural heritage within and adjacent to the County's existing built-up footprint by facilitating brownfield development and regeneration. 	<ul style="list-style-type: none"> Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities. 	<ul style="list-style-type: none"> Potential effects on known architectural and archaeological heritage and unknown archaeology however, these will occur in compliance with legislation. 	<p>Archaeological Heritage</p> <p>Policy Objective HER1: Protection of Archaeological Heritage</p> <p>Policy Objective HER2: Protection of Archaeological Material in Situ</p> <p>Policy Objective HER3: Protection of Historic Towns</p> <p>Policy Objective HER4: Carrickmines Castle Site</p> <p>Policy Objective HER5: Historic Burial Grounds</p> <p>Policy Objective HER6: Underwater Archaeology</p> <p>Architectural Heritage</p> <p>Policy Objective HER7: Record of Protected Structures</p> <p>Policy Objective HER8: Work to Protected Structures</p> <p>Policy Objective HER10: Protected Structures and Building Regulations</p> <p>Policy Objective HER11: Energy Efficiency of Protected Structures</p> <p>Policy Objective HER12: National Inventory of Architectural Heritage (NIAH)</p> <p>Policy Objective HER13: Architectural Conservation Areas</p> <p>Policy Objective HER14: Demolition within an ACA</p> <p>Policy Objective HER15: Shopfronts within an ACA</p> <p>Policy Objective HER16: Public Realm and Public Utility works within an ACA</p> <p>Policy Objective HER17: Candidate Architectural Conservation Areas</p> <p>Policy Objective HER19: Protection of Buildings in Council Ownership</p> <p>Policy Objective HER20: Buildings of Vernacular and Heritage Interest</p> <p>Policy Objective HER23: Industrial Heritage</p> <p>Policy Objective HER24: Protection of Coastline Heritage</p> <p>Policy Objective HER25: Heritage Plan</p> <p>Policy Objective HER26: Historic Demesnes and Gardens</p> <p>Policy Objective HER27: Civic Memorials</p> <p>Policy Objective HER29: The Metals</p>	CH
Landscape	<ul style="list-style-type: none"> Contributes towards protection of wider landscape and landscape designations by facilitating development within and adjacent to the County's existing built-up footprint. 	<ul style="list-style-type: none"> Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape. 	<ul style="list-style-type: none"> 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. 	<p>Landscape</p> <p>Policy Objective GIB2: Landscape Character Areas</p> <p>Policy Objective GIB3: Seascape</p> <p>Policy Objective GIB4: High Amenity Zones</p> <p>Policy Objective GIB5: Historic Landscape Character Areas</p>	L

2.5 Schedule 2A

PART 1

1. *The characteristics of the plan having regard, in particular, to: the degree to which the plan sets a framework for projects and other activities, either with regard to the location, nature, size and operating conditions or by allocating resources*

The Material Alterations propose a number of text and map-based changes to the Draft Dún Laoghaire-Rathdown County Development Plan 2022-2028.

Proposed Material Alterations identified on Table 2.4 were determined to require full SEA and these will be considered in the SEA Environmental Report.

Table 2.4 Proposed Material Alterations Requiring SEA⁸

Alteration Ref:	SEA Screening Ref – see Table 2.2
No. 83	10
No. 84	9
No. 208	In-combination with No. 306: Ref. 9
No. 218	9,10,11 – see also Alteration No. 314
No. 265	9,10
No. 269	10
No. 306	In-combination with No. 208: Ref. 9
No. 314	9,10,11 – see also Alteration No. 218
No. 316	9, 10
No. 356	12
No. 357	12
Map No. 9 Mapping Amendment M911 - to add Strategic Land Reserve at Kiltiernan	10,11

Taking the examination of the various other Proposed Material Alterations provided under Section 2.4 into account, arising from the degree to which these Proposed Material Alterations and the Draft County Development Plan set a framework for projects and other activities, the other Proposed Material Alterations would not be likely to result in significant environmental effects.

2. *The characteristics of the plan having regard, in particular, to: the degree to which the plan influences other plans, including those in a hierarchy*

The Material Alterations are being proposed to the Draft Plan. The Draft Plan relates to the proper planning and sustainable development of County Dún Laoghaire-Rathdown.

The Proposed Material Alterations identified on Table 2.4 were determined to require full SEA and these will be considered in the SEA Environmental Report.

Taking the above and the examination of the various other Proposed Material Alterations provided under Section 2.4 into account, arising from the degree to which these Proposed Material Alterations and the Draft County Development Plan influence other plans, the other Proposed Material Alterations would not be likely to result in significant environmental effects.

3. *The characteristics of the plan having regard, in particular, to: the relevance of the plan for the integration of environmental considerations in particular with a view to promoting sustainable development*

The Draft Plan - to which the Proposed Material Alterations relate - has undergone SEA. This process integrated environmental considerations into the Plan and found that the Plan contributes to environmental protection and management and sustainable development.

⁸ For detail on Proposed Material Alterations please refer to Proposed Material Alterations document. For detail on SEA Screening Ref please refer to Table 2.2.

The Proposed Material Alterations identified on Table 2.4 were determined to require full SEA and these will be considered in the SEA Environmental Report.

Taking the above and the examination of the various other Proposed Material Alterations provided under Section 2.4 into account, arising from the degree to which these Proposed Material Alterations and the Draft County Development Plan are relevant for the integration of environmental considerations with a view to promoting sustainable development, the other Proposed Material Alterations would not be likely to result in significant environmental effects.

4. *The characteristics of the plan having regard, in particular, to: environmental problems relevant to the plan*

Environmental problems arise where there is a conflict between current environmental conditions and legislative targets.

Through its provisions relating to environmental protection and management, the Draft Plan contributes towards ensuring that environmental conditions do not get worse and, where possible, they contribute towards its amelioration.

The Proposed Material Alterations identified on Table 2.4 were determined to require full SEA and these will be considered in the SEA Environmental Report.

Taking the above and the examination of the various other Proposed Material Alterations provided under Section 2.4 into account, arising from environmental problems relevant to these Proposed Material Alterations and the Draft County Development Plan, the other Proposed Material Alterations would not be likely to result in significant environmental effects.

5. *The characteristics of the plan having regard, in particular, to: the relevance of the plan for the implementation of European Union legislation on the environment (e.g. plans linked to waste-management or water protection)*

The Draft County Development Plan relates to the land use and town planning sector and have fulfilled requirements in relation to SEA. These processes integrated considerations with regard to EU and national legislation on the environment, including those relating to the waste management and the Water Framework Directive.

The Proposed Material Alterations identified on Table 2.4 were determined to require full SEA and these will be considered in the SEA Environmental Report.

Taking the above and the examination of the various other Proposed Material Alterations provided under Section 2.4 into account, arising from the relevance of these Proposed Material Alterations and the Draft County Development Plan for the implementation of European Union legislation on the environment, the other Proposed Material Alterations would not be likely to result in significant environmental effects.

PART 2

1. *Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the probability, duration, frequency and reversibility of the effects*

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

2. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the cumulative nature of the effects

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

3. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the transboundary nature of the effects

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

4. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the risks to human health or the environment (e.g. due to accidents)

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

5. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the magnitude and spatial extent of the effects (geographical area and size of the population likely to be affected)

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

6. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the value and vulnerability of the area likely to be affected due to:

a) special natural characteristics or cultural heritage;

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

b) exceeded environmental quality standards or limit values, and;

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

c) intensive land-use.

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they

would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

7. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the effects on areas or landscapes which have a recognised national, European Union or international protection status

SEA is determined as being required for the Proposed Material Alterations identified on Table 2.4 while other Proposed Material Alterations would not necessitate SEA as they would not be likely to result in significant environmental effects (see responses under Schedule 2A Part 1 above and the examination of the various Proposed Material Alterations provided under Section 2.4).

Section 3 Conclusion

Most Proposed Material Alterations are determined not likely to result in significant environmental effects. Taking into account the measures that have been already integrated into the Draft Plan that provide for and contribute towards environmental protection, environmental management and sustainable development, it is identified that all potential effects arising from most Proposed Alterations: either are present already (beneficial) and will be further contributed towards; or will be mitigated so as not to be significant (adverse). In addition, some alterations merely added clarifications or amended context setting text for Plan provisions and these will not result in significant environmental effects. Consequently, these Proposed Material Alterations do not require SEA.

The Proposed Material Alterations identified on Table 2.4 are advised as requiring SEA and consideration in an SEA Environmental Report.

The SEA Environmental Report prepared for the Draft Plan will be finalised in advance of adoption of the Plan. An SEA Statement will be prepared following adoption, which will detail how environmental considerations were integrated into the Plan and how consultations on the SEA and associated Plan-preparation process were taken into account. The Strategic Flood Risk Assessment and the Appropriate Assessment reports will be finalised in a similar manner at adoption, taking into account how environmental considerations were integrated into the Plan and how consultations were taken into account.