



DRAFT COUNTY
DEVELOPMENT
PLAN **2016-2022**

SEA Environmental Report



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List of Abbreviations

AA	Appropriate Assessment
ACA	Architectural Conservation Area
ATSEBI	Assessment of Trophic Status of Estuaries and Bays in Ireland
CFRAM	Catchment Flood Risk Assessment and Management
CSO	Central Statistics Office
DAHG	Department of Arts, Heritage and the Gaeltacht
DCENR	Department of Communications, Energy and Natural Resources
DEHLG	Department of the Environment, Heritage and Local Government
DECLG	Department of the Environment, Community and Local Government
EIA	Environmental Impact Assessment
EPA	Environmental Protection Agency
EQS	Environmental Quality Standard
EU	European Union
GSI	Geological Survey of Ireland
NHA	Natural Heritage Area
NIAH	National Inventory of Architectural Heritage
NRA	National Roads Authority
NSS	National Spatial Strategy
OPW	Office of Public Works
PAS	Priority Action Substance
RAL	Remedial Action List
RBD	River Basin District
RMP	Record of Monuments and Places
RPA	Register of Protected Areas
RPS	Record of Protected Structures
RPGs	Regional Planning Guidelines
RBMP	River Basin Management Plan
SAC	Special Area of Conservation
SEA	Strategic Environmental Assessment
SEO	Strategic Environmental Objective
SFRA	Strategic Flood Risk Assessment
SI No.	Statutory Instrument Number
SPA	Special Protection Area
UCD	University College Dublin
WFD	Water Framework Directive
WMU	Water Management Unit
WSSP	Water Services Strategic Plan

Glossary

Appropriate Assessment

The obligation to undertake Appropriate Assessment 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 or project, alone and in combination with other strategic actions and projects, on the integrity of a Natura 2000 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.

Biotic Index Values (Q Values)

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

Environmental Problems

Annex I of Directive 2001/42/EC of the European Parliament and of the Council of Ministers, of 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 so that they come into contact with human beings.

Mitigate

To make or become less severe or harsh.

Mitigation Measures

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

Protected Structure

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

Recorded Monument

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

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

Strategic Environmental Assessment (SEA)

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

Strategic Environmental Objective (SEO)

Strategic Environmental Objectives (SEOs) are methodological measures 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 and the alternatives can be evaluated in order to help identify which provisions would be likely to result in significant environmental effects and where such effects would be likely to occur, if - in the case of adverse effects - unmitigated.

Section 1 SEA Introduction and Background

1.1 Introduction and Terms of Reference

This is the Strategic Environmental Assessment (SEA) Environmental Report for the Dún Laoghaire-Rathdown County Development Plan 2016-2022. It has been undertaken by CAAS Ltd. on behalf of Dún Laoghaire-Rathdown County Council.

The purpose of this report is to provide a clear understanding of the likely environmental consequences of decisions regarding the adoption and implementation of the Plan. The SEA is carried out in order to comply with the provisions of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004) as amended. This report should be read in conjunction with the Draft Plan.

1.2 SEA Definition

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 insure that these effects are adequately addressed at the earliest appropriate stages of decision-making in tandem with economic, social and other considerations.

1.3 SEA Directive and its transposition into Irish Law

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, referred to hereafter as the SEA Directive, introduced the requirement that SEA be carried out on plans and programmes which are prepared for a number of sectors, including land use planning.

The SEA Directive was transposed into Irish Law through the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (Statutory Instrument Number (SI No. 435 of 2004) and the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004). Both sets of Regulations became operational on 21st July 2004. The Regulations have been amended by the European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011 (SI No. 200 of 2011) and the Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011 (SI No. 201 of 2011).

1.4 Implications for the Plan and the Planning Authority

Article 7 of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004) as amended requires that Strategic Environmental Assessment is undertaken for the preparation of certain Development Plans.

The findings of the SEA are expressed in this Environmental Report, which accompanies the Draft Plan on public display and may be altered in order to take account of recommendations contained in submissions and in order to take account of any changes which are made to the Draft Plan on foot of submissions. Members of the planning authority are required to take into account the findings of this Report and other related SEA output during their consideration of the Draft Plan and before its adoption. On the adoption of the Plan, an SEA Statement will be prepared which will summarise, inter alia, how environmental considerations have been integrated into the adopted Plan.

Section 2 The Draft Plan

2.1 Review Process and Statutory Context

Under the Planning and Development Act, 2000 as amended, each Planning Authority is obliged to prepare a development plan for its functional area every six years, the review of which should commence four years after its adoption. Accordingly the review process of the current County Development Plan (CDP) in preparation of the Dún Laoghaire-Rathdown CDP 2016-2022, began in March 2014 when extensive notification of the review process was given and notice was published and forwarded to the relevant bodies. The CDP has been prepared in accordance with Section 11 and 12 of the Planning and Development Act 2000 (as amended).

2.2 Background to the Draft Plan

The Draft Plan sets out an overall strategy for the proper planning and sustainable development of the functional area of Dún Laoghaire-Rathdown County Council for the period 2016-2022.

The Planning and Development Act 2000, as amended, requires a planning authority to prepare a Development Plan for its functional area every six years.

The Draft Plan has been prepared in accordance with the requirements of section 10(2) of the Planning and Development Act 2000, as amended.

2.3 Content of the Draft Plan

The Draft Plan has been prepared by Dún Laoghaire-Rathdown County Council and comprises of a written document with maps, and various appendices.

It's overall vision is to continue to facilitate appropriate levels of sustainable development predicated on the delivery of high quality community, employment and recreational environments - allied to the promotion of

sustainable transportation and travel patterns - but all the while protecting Dún Laoghaire-Rathdown's unique landscape, natural heritage and physical fabric, to ensure the needs of those living and working in the County can thrive in a socially, economically and environmentally sustainable manner.

The Plan has been structured into 10 main Chapters which deal with various topics as outlined below. These chapters contain different types of provisions (visions, policies, objectives and standards) which will be applied to future development proposals in the County.

1. Strategic Overview

- 1.1 Introduction and Context
- 1.2 Core Strategy
- 1.3 Development Areas and Regeneration

2. Sustainable Communities Strategy

- 2.1 Residential Development
- 2.2 Sustainable Travel and Transportation

3. Enterprise and Employment Strategy

- 3.1 Enterprise and Employment
- 3.2 Retailing and Major Town Centres

4. Green County Strategy

- 4.1 Landscape, Heritage and Biodiversity
- 4.2 Open Space and Recreation

5. Physical Infrastructure Strategy

- 5.1 Environmental Infrastructure and Management
- 5.2 Climate Change, Energy Efficiency and Flooding

6. Built Heritage Strategy

- 6.1 Archaeology and Architectural Heritage

7. Community Strategy

- 7.1 Social Infrastructure and Community Development

8. Principles of Development

- 8.1 Urban Design Strategy
- 8.2 Development Management
- 8.3 Land Use Zoning Objectives

9. Specific Local Objectives

10. Strategic Environmental Assessment (SEA) and Appropriate Assessment (AA)

The Plan contains 15 Appendices as follows:

1. National, Regional and Local Context
2. Housing Strategy
3. Ecological Network
4. RPS/RMP/ACAs/CACAs
5. Industrial Heritage Survey
6. Wind Energy Strategy
7. Landscape Character Areas
8. ROW/RAR
9. Building Height Strategy
10. Development Management Thresholds Information
11. Rural Design Guide
12. Dún Laoghaire Urban Framework Plan
13. Strategic Flood Risk Assessment
14. Green Infrastructure Strategy
15. Sandyford Urban Framework Plan

2.4 Strategic work done by the Council to ensure contribution towards environmental protection and sustainable development

Far in advance of both the submission of the pre-Draft Plan to the Elected Members for approval and the placing of the Draft Plan (and associated SEA, AA and SFRA documents) on public display, Dún Laoghaire-Rathdown County Council undertook various works in order to inform the preparation of the Draft Plan.

The findings of this strategic work have been integrated into the Draft Plan and will be implemented when it is adopted, contributing towards both environmental protection and management and sustainable development within the County.

Strategic work done by the Council includes the preparation of the following:

- Background work in relation to the Sustainable Communities Strategy
- Background work in relation to the Enterprise and Employment Strategy

- Background work in relation to the Physical Infrastructure Strategy
- Background work in relation to the Built Heritage Strategy
- Background work in relation to the Community Strategy
- Housing Strategy
- Ecological Network
- Review of Wind Energy Strategy
- Review of Landscape Character Areas
- Green Infrastructure Strategy
- Review of DLUFF
- Review of SUFF
- Climate Change proofing of existing Dún Laoghaire-Rathdown County Development Plan 2010 -2016

The undertaking of this SEA process as well as the undertaking of the AA and SFRA 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.

2.5 Relationship with other relevant Plans and Programmes

2.5.1 Introduction

The Plan sits within a hierarchy of land use forward planning strategic actions. The Plan must comply with relevant higher level strategic actions and may, in turn, guide lower level strategic actions. Much of the text of the following sections is taken from Appendix I of the Plan.

International

- EU Habitats Directive
- EU Urban Waste Water Directive
- EU Water Framework Directive
- EU Waste Framework Directive
- EU Drinking Water Directive
- EU Bathing Water Directive
- EU Freshwater Fish Directive
- EU Marine Strategy Framework Directive
- EU Floods Directive
- EU SEA Directive
- EU Control of Major Accidents Directive
- EU Ambient Air Quality and Cleaner Air for Europe Directive
- EU - Energy Performance of Building Directive
- EU Energy Efficiency Directive

National

- National Spatial Strategy 2002-2020, People Places Potential, (2002)
- Infrastructure and Capital Investment 2012–2016: Medium Term Exchequer Framework (2011)
- Smarter Travel – A Sustainable Transport Future (2009)
- National Cycle Policy Framework 2009-2020 (2009)
- Construction 2020 A Strategy for a Renewed Construction Sector (2014)
- Irish Water Proposed Capital Investment Plan 2014-2106 (2014)
- Our Sustainable Future: A Framework for Sustainable Development in Ireland 2012 (2012)
- National Heritage Plan (2002)
- Actions for Biodiversity, 2011 – 2016 (2011)
- Towards a Resource Efficient Ireland, A National Strategy to 2020, incorporating Irelands National Waste Prevention Programme (2014)
- National Hazardous Waste Management Plan, 2014-2020 (2014)
- Putting People First Action Programme for Effective Local Government (2012)
- The National Action Plan for Social Inclusion 2007-2016 (2007)
- Buildings for Everyone: A Universal Approach (2012)
- National Disability Strategy Implementation Plan 2013-2015 (2103)
- A Strategy for Public Libraries 2013-2017 (2013)
- Student Accommodation Scheme (2007)
- Achieving Effective Workplace Travel Plan Guidance for Local Authorities (2012)
- National Climate Change Strategy 2007-2012 (2007)
- National Climate Change Adaptation Framework, Building Resilience to Climate Change (2012)
- Towards nearly Zero Energy Buildings in Ireland Planning for 2020 and Beyond (2012)
- Ireland and the Climate Change Challenge: Connecting How Much with How To (2012).
- National Energy Efficiency Action Plan 3 (NEEAP) (2009)

Regional

- Regional Planning Guidelines for the Greater Dublin Area 2010-2022 (2010)
- Retail Strategy for the Greater Dublin Area 2008-2016 (2008)
- Greater Dublin Area Draft Transport Strategy 2011 – 2030, 2030 Vision (2011)
- Integrated Implementation Plan 2013-2018 (2013)
- Greater Dublin Area Cycle Network Plan (2013)
- Planning and Development of Large-Scale, Rail Focussed Residential Areas in Dublin (2013)
- Greater Dublin Strategic Drainage Study (2005)
- Greater Dublin Water Supply Strategic Study 1996-2016 (1996)
- Eastern River Basin District River Basin Management Plan 2009-2015 (2010)
- Dublin Mountains Strategic Plan for Development of Outdoor Recreation 2007-2017 (2007)
- Waste Management Plan for the Dublin Region 2005-2010 (2005)
- Air Quality Management Plan for the Dublin Region 2009-2012 (2009)
- Dublin Agglomeration Environmental Noise Action Plan December 2013–2018 (2013)
- Green City Guidelines (2008)

Ministerial Guidelines

- Sustainable Residential Development in Urban Areas (2009)
- Urban Design Manual Best Practice Guidelines (2009)
- Sustainable Urban Housing: Design Standards for New Apartments (2007)
- Delivering Homes, Sustaining Communities (2007)
- Quality Housing for Sustainable Communities (2007)
- The Planning System and Flood Risk Management (2009)
- Irish Design Manual for Urban Roads and Streets (2013)
- Spatial Planning and National Roads – Guidelines for Planning Authorities (2012)
- National Cycle Manual (2011)
- A Resource Opportunity Waste Management Policy in Ireland (2012)

- Appropriate Assessment of Plans and Projects in Ireland. Guidelines for Planning Authorities (2010)
- Implementation of SEA Directive (2001/42/EC): Assessment of the Effects of Certain Plans and Programmes on the Environment, Guidelines for Regional Authorities and Planning Authorities (2004)
- Implementation of SEA Directive (2004)
- Environmental Impact Assessment (EIA) Guidance for Consent Authorities regarding Sub-Threshold Development (2003)
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (2013)
- Code of Practice on the Provision of Schools and the Planning System (2008)
- **"Ready Steady Play! A National Play Policy** (2004),
- Childcare Facilities- Guidelines for Planning Authorities (2001)
- National Childcare Strategy: A Guide for Providers 2006-2010 (2006)
- Quarries and Ancillary Activities (2004)
- Architectural Heritage Protection. Guidelines for Planning Authorities (2011)
- Framework and Principles for the protection of the Archaeological Heritage (1999)
- Government Policy on Architecture 2009-2015: Towards a Sustainable Future: Delivering Quality within the Built Environment (2009)
- Retail Planning Guidelines for Planning Authorities (2012)
- Sustainable Rural Housing Guidelines for Planning Authorities (2005)
- Development Plans: Guidelines for Planning Authorities (2007)
- Local Area Plans Guidelines for Local Authorities (2013) and Manual for Local Area Plans (2013)
- Wind Energy- Development Guidelines for Planning Authorities (2006)
- Telecommunications Antennae and Support Structures-Guidelines for Planning Authorities (1996)
- Government Policy Statement on **'Strategic Importance of Transmission and Other Energy Infrastructure'** (2012)
- Bio-Energy Action Plan for Ireland (2007)

- Government White paper **'Delivering a Sustainable Energy Future for Ireland, Energy Policy Framework 2007-2020'** (2007)
- A Draft National Landscape Strategy for Ireland 2014-2024 (2014)
- Tree Preservation - Guidelines for Planning Authorities (1994)

Local Documents

- Guidelines for Sustainable Development, Dún-Laoghaire-Rathdown County Council (1999)
- Dún Laoghaire-Rathdown Cycle Network Review Study Report (2012)
- Dún Laoghaire-Rathdown County Council Cycling Policy. Smarter Travel, Better Living (2010)
- Traveller Accommodation Programme 2014 – 2018 (2008)
- Dún Laoghaire-Rathdown Arts Development Policy 2011 – 2014 (2011)
- Dún Laoghaire-Rathdown Heritage Plan 2013 – 2019 (2013)
- Parklife: A Policy for enhancing Biodiversity in Parks and Green Spaces: An action of the Dún Laoghaire-Rathdown 2009-2013 (2009)
- LR Open Space Strategy 2012-2015
- DLR Trees: A Tree Strategy for Dún-Laoghaire Rathdown 2011-2015 (2011)
- Dalkey Islands Conservation Plan 2013-2023 (2013)
- Green Infrastructure Strategy (2014)
- Taking In Charge Policy Document (2011-updated-2013)
- Coastal Defence Strategy Study (2010)
- DLR Green Roof Guidance Document (2014)
- DLR Library Development Programmes 2010-2013 and 2015-2018
- DLR Building Heights Strategy (2011)
- Cherrywood Planning Scheme (2014)
- Sandyford Urban Framework Plan 2011-2016 (2011)
- Dún Laoghaire Urban Framework Plan 2016-2022
- Deansgrange Local Area Plan 2010–2020 (2010)
- Goatstown Local Area Plan 2012-2018 (2012)
- Glencullen Local Area Plan 2008–2018 (2008)

- Kiltiernan/Glenamuck Local Area Plan 2013 – 2019 (2013)
- Stilorgan Local Area Plan 2007–2017 (2007)
- Woodbrook/Shanganagh Local Area Plan 2006–2016 (2006)
- Stepside Action Area Plan (2000)

2.5.2 National Spatial Strategy

The National Spatial Strategy (NSS) 2002-2020 is a 20 year National Plan that sets out a strategy for balanced Regional development across Ireland and it informs National decisions as to where development (and Government investment) should take place. The NSS, while acknowledging the Greater Dublin Area (GDA) as the driver of the national economy, seeks to promote a better balance of population, jobs and development elsewhere in the State. The NSS is now twelve years old and is currently under review by the Department of the Environment, Community, and Local Government and is likely to be replaced during the County Development Plan process.

2.5.3 Infrastructure and Capital Investment

The Infrastructure and Capital Investment Plan 2012-2016 (Medium Term Exchequer Framework) succeeded the National Development Plan which ran from 2007-2010. This Plan was formulated – at a time of tight fiscal constraints - to assess the capacity of **Ireland's infrastructure and identify remaining gaps** which needed to be addressed to aid economic recovery, social cohesion and environmental sustainability.

2.5.4 Regional Planning Guidelines

The Regional Planning Guidelines (RPGs) for the Greater Dublin Area 2010-2022 provide an overall spatial policy framework for the GDA to 2022 and focus on the physical consolidation of the Dublin Metropolitan Area and the proper integration of land use and transportation to promote more sustainable forms of **development across the Region**. RPG's projections for population and housing targets, published in June 2010, suggest that the GDA will grow significantly through both natural increase and continued in-migration. Up to 118,000 new houses could be needed across

the seven GDA Local Authorities by 2022 to cater for the demand generated by the combination of population increase and changing household composition. Substantial retail and commercial development and the commensurate delivery of social and community infrastructure will also be needed to cater for the scale of projected growth.

It is worth noting that these projections were prepared prior to the Census in 2011. It should also be noted that the current GDA Regional Authority will be replaced this year by a new Eastern and Midlands Regional Assembly. This will result in the existing RPGs being replaced. The timing of both the establishment of the new larger Regional Assembly and the review of the NSS presents some logistical difficulties in the preparation of a strategic County Development Plan document which should be guided by and consistent with up-to-date National and Regional guidance.

2.5.5 Other Lower Tier Land Use Plans

Detailed land use plans have been adopted for local areas and have been taken into account, integrated or included within the Draft County Plan. Such plans include the following:

- Sandyford Urban Framework Plan 2011-2016 (2011)
- Dún Laoghaire Urban Framework Plan 2016-2022
- Cherrywood Planning Scheme (2014)
- Deansgrange Local Area Plan 2010–2020 (2010)
- Goatstown Local Area Plan 2012-2018 (2012)
- Glencullen Local Area Plan 2008–2018 (2008)
- Kiltiernan/Glenamuck Local Area Plan 2013 – 2019 (2013)
- Stilorgan Local Area Plan 2007–2017 (2007)
- Woodbrook/Shanganagh Local Area Plan 2006–2016 (2006)
- Stepside Action Area Plan (2000)

The draft Plan proposes a number of new Local Area Plans including the Ballyogan and Environs Local Area Plan, Sallynoggin Local Area Plan and the Dundrum Local Area Plan.

2.5.6 Eastern River Basin Management Plan

Local Authorities including Dún Laoghaire-Rathdown County Council have prepared a River Basin Management Plan and Programme of Measures for the Eastern River Basin District (ERBD) 2009-2015 which is implemented in order to help protect and improve waters in the County and wider River Basin Districts.

The ERBD Management Plans and associated Programmes of Measures include provisions to help ensure that water bodies in the district meet the objectives of the Water Framework Directive. The Plan identifies the status of water bodies within the RBD and provides objectives in order to implement the requirements of the Water Framework Directive.

In 2015, a second River Basin Management Plan will be published outlining the status of the ERBD and measures for future management.

2.5.7 National Catchment Flood Risk Assessment and Management Programme

A Catchment Flood Risk Assessment and Management (CFRAM) Study is being undertaken for the Eastern River Basin District by the Office of Public Works.

The national 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. The Programme is being implemented through CFRAM Studies which are being undertaken for each of the six river basin districts in Ireland.

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. In 2015, draft Flood Maps will be published. The final output from the studies will be CFRAM Plans, to be published in December 2016. The Plans will define the current and future flood risk in the River Basin

Districts and set out how this risk can be managed.

2.5.8 Smarter Travel 2009

'Smarter Travel' is the Government's action plan to free towns and cities from traffic congestion, substantially cut CO2 emissions and encourage car based commuters to leave their cars at home. This plan sets out 49 individual actions to encourage a shift toward walking, cycling and greater public transport usage. By 2020 the aim is to move 500,000 potential car based commuters to other more sustainable forms of transport and in doing so, cut CO2 emissions by at least 4 million tonnes. The Plan aims to ensure that electric vehicles account for 10% of all vehicles on the roads and to move over 150,000 people to work by bike each year.

2.5.9 GRID 25 and associated Implementation Plan

Grid25 is a high-level strategy outlining how EirGrid intends to undertake the development of the electricity transmission grid in the short, medium and longer terms, to support a long-term sustainable and reliable electricity supply. The Grid25 strategy thereby seeks to implement the provisions of the 2007 Government White Paper on Energy - "Delivering a Sustainable Energy Future for Ireland" in terms of development of electricity transmission infrastructure. The Grid25 Implementation Programme is a practical strategic overview of how the early stages of Grid25 are intended to be implemented.

2.5.10 Draft National Peatlands Strategy

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

2.5.11 National Strategic Aquaculture Plan

Bord Iascaigh Mhara (BIM) is assisting the Department of Agriculture, Fisheries and the Marine in preparing a National Strategic Aquaculture Plan. The Plan is being prepared in compliance with Strategic EU Guidelines for the Sustainable Development of EU Aquaculture and will be consistent with the aim of the proposal for the Common Fisheries Policy reform to promote aquaculture through "an open method of co-ordination". The NSPA will complement the National Seafood Operational Programme and will cover the period 2014-2020 (with mid-term assessment in 2017).

for the protection of inland surface waters, transitional waters, coastal waters and groundwater which, among other things, prevents deterioration in the status of all water bodies and protects, enhances and restores all waters with the aim of achieving good status by 2015.

2.5.12 New Waste Management Plans

In accordance with Section 22 of the Waste Management Act, 1996 and the Waste Management (Planning) Regulations, 1997, notice was given of the intention to commence the preparation of new Regional Waste Management Plans in 2013.

There will be three new Plans prepared for the following new waste management planning regions:

- Connacht-Ulster;
- Eastern-Midland (comprising local authorities: Dún Laoghaire-Rathdown, Dublin City, Fingal, Kildare, Laois, Longford, Louth, Meath, Offaly, South Dublin, Wicklow and Westmeath); and
- Southern.

2.5.13 Environmental Protection Objectives

The Draft is subject to a number of high level environmental protection policies and objectives with which it must comply, including those which have been identified as Strategic Environmental Objectives in Section 5.

Examples of Environmental Protection Objectives include the aim of the EU Habitats Directive - which is to contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora in the European territory of Member States - and the purpose of the Water Framework Directive - which is to establish a framework

Section 3 SEA Methodology

3.1 Introduction to the Iterative Approach

This section details how the SEA has been undertaken alongside the preparation of the Draft Plan. Figure 3.1 lays out the main stages in the Draft Plan/SEA preparation process.

The Draft Plan and associated SEA, AA and SFRA documents were prepared in an iterative manner whereby multiple revisions of each document were prepared, each informing subsequent iterations of the others.

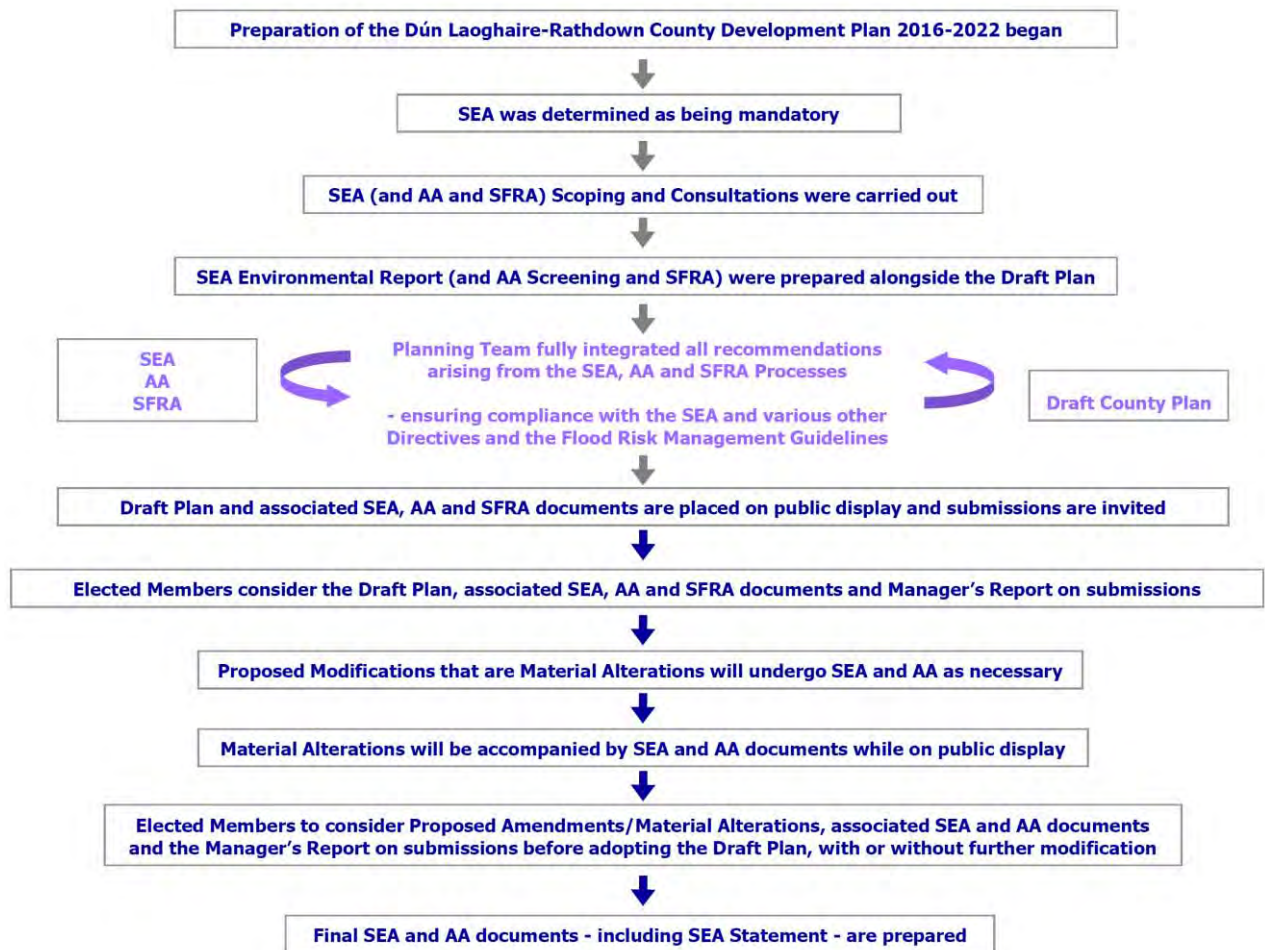


Figure 3.1 County Development Plan and SEA Stages

3.2 Appropriate Assessment and Integrated Biodiversity Impact Assessment

3.2.1 Appropriate Assessment

Appropriate Assessment (AA) Screening has been undertaken alongside the Draft Plan. The requirement for AA is provided under the EU Habitats Directive (Directive 1992/43/EEC). The AA Screening concluded that the Plan will not affect the integrity of the Natura 2000 network.

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

3.2.2 Integrated Biodiversity Impact Assessment

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

Scoping

- Biodiversity-relevant issues were identified for consideration at scoping stage and these are now detailed in Section 4.3.
- Reference to a zone of influence is provided, including at Section 4.3.

Baseline

- Biodiversity data sources relevant for this County 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 under 3 alternatives.

Impact assessment

- Effects on biodiversity are identified and assessed and the AA gives consideration to the interrelationship between biodiversity and potential effects on European sites.

Mitigation and monitoring

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

Reporting

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

Communication and consultation

- Submissions from both the EPA and NPWS have been taken on board.
- The preparation of the Draft Plan, SEA and AA has taken place concurrently and the findings of the AA have informed both the Draft Plan and the SEA.

3.3 Strategic Flood Risk Assessment

A Strategic Flood Risk Assessment (SFRA) has been undertaken alongside the Draft Plan.

The requirement for SFRA is provided under 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (DECLG, 2009).

The preparation of the Draft Plan, SEA and SFRA has taken place concurrently and the findings of the SFRA have informed both the Draft Plan and the SEA. All recommendations made by the SFRA and SEA in relation to flood risk management have been integrated into the Draft Plan.

3.4 Scoping

3.4.1 Introduction

In consultation with the relevant authorities, the scope of environmental issues to be dealt with by the SEA together with the level of detail to which they are 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 which are specified under the SEA Directive¹.

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

3.4.2 Scoping Notices

All relevant environmental authorities² identified under the SEA Regulations as amended, were all sent SEA scoping notices by the Council indicating that submissions or observations in relation to the scope and level of detail of the information to be included in the environmental report could be made to the Council.

3.4.3 Submissions

Submissions were made by the Environmental Protection Agency and the Department of Arts, Heritage and the Gaeltacht during the SEA Scoping/Draft Plan-preparation process. These submissions influenced the scope of the assessments as detailed in the final SEA Scoping Report.

3.5 Environmental Baseline Data

The SEA process is informed by the environmental baseline (i.e. the current state of the environment) to facilitate the identification and evaluation of the likely significant environmental effects of implementing the provisions of the Draft Plan and the alternatives and the subsequent monitoring of the effects of implementing the provisions of the Plan as adopted.

¹ 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.

² These comprise: Environmental Protection Agency, Department of Communications, Energy and Natural Resources, Department of Agriculture, Fisheries and Food, Department of the Environment, Community and Local Government, Department of Arts, Heritage and the Gaeltacht, Dublin City Council, South Dublin County Council and Wicklow County Council.

3.6 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, three alternative scenarios for the Plan are examined in Section 6.

3.7 The SEA Environmental Report

In this SEA Environmental Report, which is placed on public display alongside the Draft Plan, the likely environmental effects of the Draft Plan and the alternatives are predicted and their significance evaluated.

The Environmental Report provides the Council, stakeholders and the public with a clear understanding of the likely environmental consequences of the Draft Plan.

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

The Environmental Report will be updated in order to take account of recommendations contained in submissions and in order to take account of changes which are made to the original, Draft Plan that is being placed on public display.

The Environmental Report is required to contain the information specified in Schedule 2 of the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (SI No. 435 of 2004) as amended (see Table 3.1).

3.8 The SEA Statement

On the making of the Plan by the Council, an SEA Statement will be prepared which will include information on:

- How environmental considerations have been integrated into the Plan, highlighting the main changes to the Plan which resulted from the SEA process;

- How the 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.

3.9 Difficulties Encountered

The lack of a centralised data source that could make all environmental baseline data for the County both readily available and in a consistent format posed a challenge to the SEA process. This difficulty is one which has been encountered while undertaking SEAs at Local Authorities across the country and was overcome by investing time in the collection of data from various sources and through the use of Geographical Information Systems.

In addition the fact that the CFRAM maps have not yet been finalised for the Eastern District posed a challenge.

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 and 9
(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 6, 7 and 8
(I) A description of proposed monitoring measures	Section 10
(J) A non-technical summary of the above information	Non-Technical Summary
(K) Interrelationships between each environmental topic	Addressed as it arises within each Section

Section 4 Environmental Baseline

4.1 Introduction

The SEA Directive requires that the information on the baseline environment is focused upon the relevant aspects of the environmental characteristics of areas likely to be significantly affected and the likely evolution of the current environment in the absence of the Draft Plan. Being consistent with the strategic provisions of the Draft Plan, this section provides a strategic description of aspects of environmental components which have the greatest potential to be affected by implementation of the Draft Plan.

Article 5 of the SEA Directive states that the report shall include the information that may reasonably be required taking into account:

- Current knowledge and methods of assessment;
- The contents and level of detail in the plan or programme and its stage in the decision-making process; and
- The extent to which certain matters are more appropriately assessed at different levels in that process in order to avoid duplication of the assessment.

What this means in practice is, *inter alia*, with regard to Draft Plan, that SEA involves collating currently available, relevant environmental data; it does not require major new research. Where data deficiencies or gaps exist, this should be acknowledged in the report.

The administrative area of Dún Laoghaire-Rathdown County Council for which the Draft Plan has been prepared comprises 125.8 km², the smallest administrative County area in the country. The area stretches a maximum distance of 14.8 km in an east-west direction and a maximum distance of 14.6 km in a north-south direction.

The administrative area of Wicklow County Council lies to the south of the County while the administrative areas of Dublin City Council and South Dublin County Council lie to the north and west of the County respectively. The eastern and most of the northern boundary are confined by the sea. The remainder of the

northern boundary is guided by the River Dodder to the north-west. The Owendoher River and various field boundaries define the western boundary.

The County consists of extensive suburbs with embedded towns and villages, agricultural lands and natural/semi-natural upland areas. Approximately two thirds of the County is made of the built-up area which forms part of suburban Dublin and comprises various uses including residential, commercial and industrial. The remaining one third can be described as rural settlement which disperses into agricultural lands and then rises into the upland scenic area of the Dublin Mountains.

In terms of landscape, the County has a significant coastal landscape and seascape - with 17 kilometres of coastline stretching along the north and east of the County - and significant upland landscapes which comprises the Dublin Mountains and their foothills - the Mountains rise in excess of 500m in places such as Two Rock, Glendoo and Glencullen.

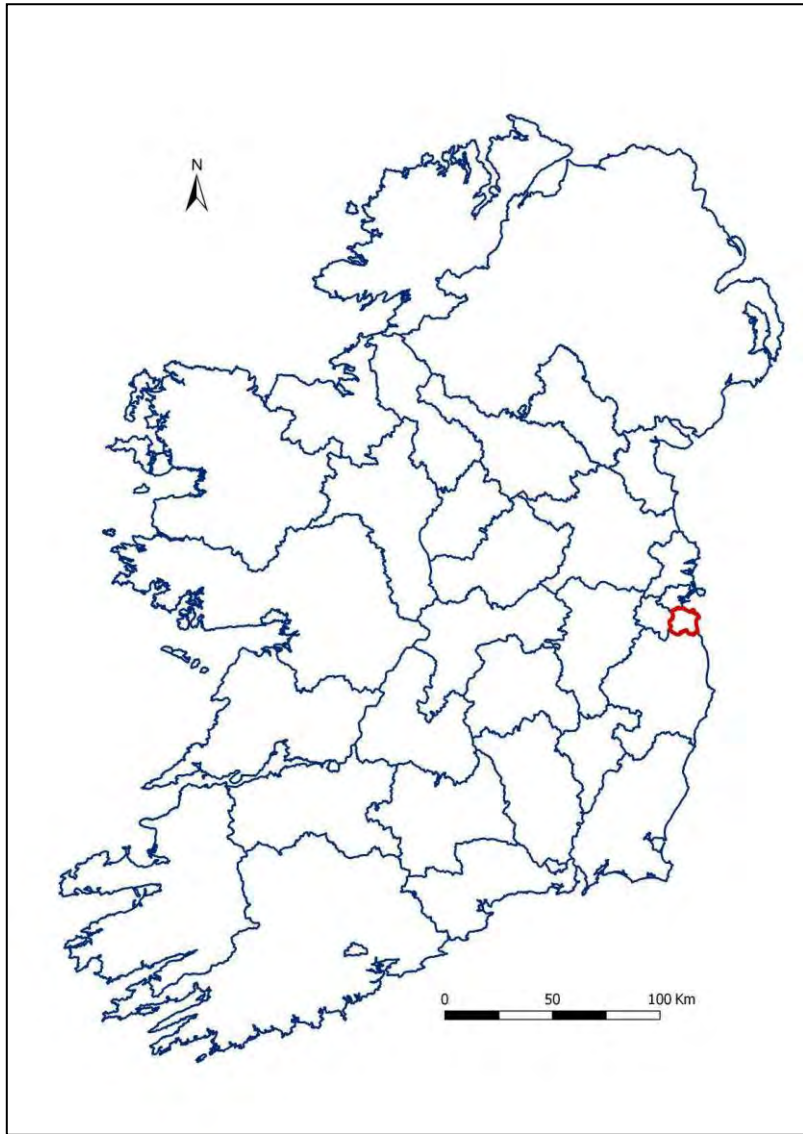


Figure 4.2 Context of the plan area in relation to the island of Ireland

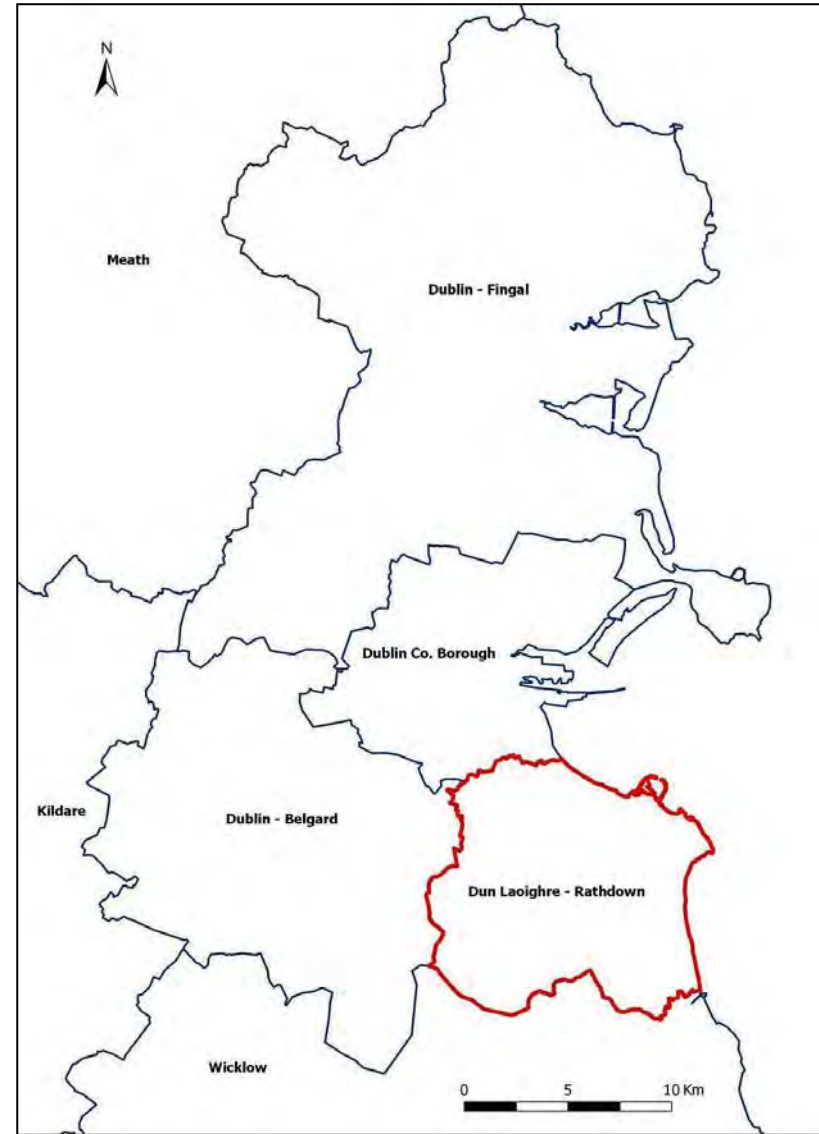


Figure 4.1 Context of the plan area in relation to County Dublin and surrounding region



Figure 4.3 Ordnance Survey map of the plan area

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

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

The current County Plan has contributed towards environmental protection within Dún Laoghaire-Rathdown.

If the current Plan was to expire and not be replaced by a new 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. Such development could result in an increase in the occurrence of adverse effects on all environmental components, especially those arising cumulatively. Cumulative effects occur as a result of the addition of many small impacts to create one larger, more significant, impact.

Such adverse effects could include:

- Loss of biodiversity with regard to Natura 2000 Sites and Annexed habitats and species;
- Loss of biodiversity with regard to ecological connectivity and 'stepping stones';
- Loss of biodiversity with regard to designated sites including Wildlife Sites and listed species;
- Spatially concentrated deterioration in human health;
- Damage to the hydrogeological and ecological function of the soil resource;
- Adverse impacts upon the status and quality of water bodies, including bathing waters;
- Increase in the risk of flooding;
- Failure to provide adequate and appropriate waste water treatment;
- Failure to comply with drinking water regulations and serve new

development with adequate drinking water that is both wholesome and clean;

- Increases in waste levels;
- Failure to contribute towards sustainable transport and associated impacts;
- Effects on entries to the Record of Monuments and Places and other archaeological heritage;
- Effects on entries to the Records of Protected Structures and other architectural heritage; and
- Occurrence of adverse visual impacts.

4.3 Biodiversity and Flora and Fauna

4.3.1 Overview of High Value Biodiversity

Dún Laoghaire-Rathdown supports a variety of natural and semi-natural habitats and a wide range of plant and animal species, which have come under threat due to development pressures and increased demand for new development land.

Green space, which makes up a large part of the southern portion of the County, consists of a variety of habitats including corridors which 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 and a number of open spaces in residential areas. There are also a number of large parks within the County including Marlay Park, Deerpark, Cabinteely Park and Shanganagh Park.

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 be present along sections of the stream. 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 the Dalkey Coastal Zone, 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.

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.

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

The **Dalkey Islands Conservation Plan 2013-2023** was adopted by the Council in September 2013. The Plan sets out guiding principles for the conservation of the heritage and habitats of the island. The Dalkey Islands are protected as an SAC.

White Young Green Environmental was commissioned by Dún Laoghaire-Rathdown County Council to undertake a **Habitat Mapping Survey** and prepare a habitat map³ of the County based on existing GIS data and a ground survey. On a county level, buildings and built land is identified as being the largest habitat group covering approximately 43% of the County area. Cultivated land, including agriculture was the second largest group type covering approximately 24% of the County. Semi-natural natural habitats covered approximately 17% non-native and disturbed ground covering 17%. Farming and urban dwellings, which are identified as being the main land use and land management activity

³ White Young Green (2007) *Habitat Mapping Survey for Dún Laoghaire-Rathdown County Council*, Dún Laoghaire-Rathdown County Council

in the area, exerts a major influence upon the local ecology and landscape character.

The Habitat Mapping Survey was undertaken in accordance with the classification scheme identified in by the Heritage Council. This classification scheme 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).

Surveys to each level can be seen on Figure 4.4 and Figure 4.5 respectively. Analysis of survey data revealed a total of 36 terrestrial habitats recorded from the southern survey area in accordance with Level 3 of the **Heritage Council's classification system (2000)**.

Three **Areas of High Ecological Value** which include a number of high diversity habitats were identified in the Habitat Mapping Survey. These areas are listed and briefly described below.

1. Upland Region to the South East of the County.

This area, which begins at the Glendoo Mountains, is an upland area with 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.

2. Woodland Area to the South East of the County

Located in the south eastern area 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.

3. Kiltiernan / Loughlinstown Area

This area is located to the east of Kiltiernan and is surrounded by an area dominated by agricultural grassland lies a large pocket of dry meadows and grassy verges. This habitat is particularly rich in species diversity. Enhancing the ecological value of the area is a large strip of wet grassland, mixed broadleaved

woodland, wet pendulate oak-ash-hazel woodland and riparian woodland.

4.3.2 Ecological Networks and Connectivity

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

Article 10 of the Habitats Directive recognises the importance of ecological networks as corridors and stepping stones for wildlife, including for migration, dispersal and genetic exchange of species of flora and fauna. The Directive requires that ecological connectivity and areas of ecological value outside the Natura 2000 network of designated ecological sites are maintained and it recognises the need for the management of these areas through land use planning and development policies. Ecological networks are important in connecting areas of local biodiversity with each other and with nearby designated sites so as to prevent islands of habitat from being isolated entities. Ecological networks are composed of linear features, such as treelines, hedgerows, rivers and streams, which provide corridors or stepping stones for wildlife species moving within their normal range. They are particularly important for mammals, especially for bats and small birds.

Within and surrounding the County, the ecological networks are made up of components including the Loughlinstown River, the Little Dargle and the Cabinteely, Ballyogan, and the Glenamuck 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.

A hedgerow survey of the west, south and central parts of the Plan area has been undertaken as part of the Habitat Mapping Survey described above. The hedgerow survey identifies the most important hedgerows in the County in terms of their biodiversity.

Parks and open spaces cover over 800 hectares of the County. Prominent parks include Marlay Park, Cabinteely Park, The Peoples Park, Killiney Hill Park and the seafront from Dún Laoghaire to Sandycove. These parks and open spaces provide for a range of habitats for various species within the Plan area.

Ecological islands or areas of habitat that are not connected to surrounding ecologically valuable habitats are mainly found to the north of the study area, where development pressures are highest.

The county-wide Ecological Network Map that was prepared as part of the Draft-Plan preparation process is provided at Figure 4.6. This map comprises is taken from Appendix 3 of the Draft Plan. The Network, which extends beyond the County into neighbouring counties, has been prepared using data derived from the various biodiversity studies that have been undertaken in recent years as part of the County Biodiversity Plan. Not all areas studied have been mapped as many are already subsumed into and incorporate parts of the high amenity, green belt, agricultural and open space zoning objective areas which are all shown on the map. However a number of areas have been shown - namely the ten upland areas studied and also the calcareous grasslands at Kingston, Kiltiernan. These areas are not currently afforded any statutory protection but the local studies in relation to these areas have concluded that they are worthy of pNHA status.

Biodiversity studies informing the Ecological Network Map include the following assessments which have been undertaken either in-house or by consultants commissioned by Dún Laoghaire-Rathdown County Council:

- Dún Laoghaire-Rathdown Hedgerow Survey (2008), RSK Carter Ecological.
- Calcareous Grasslands at Kingston, Kiltiernan (2009), Melinda Lyons.
- Landscape Conservation for Irish bats. Summary report for Dún Laoghaire-Rathdown, 2012, Bat Conservation Ireland.
- A Report on the Collation and Review of Biodiversity Data for the Coastal zone (2009), Golder Associates.
- Assessment Of The Nature Conservation Value Of Loughlinstown Wood (2012), Denyer Ecology.
- Report to Dún Laoghaire-Rathdown County Council on the Rare Plant Survey (2009 & 2010), David Nash and Sylvia Reynolds.
- A Survey of Squirrel Populations in Barnaslingan, Carrickgollogan, Ticknock & Kilmashogue Woodlands (2010), Geoff Hamilton.
- **'Parklife'** - a Policy for Enhancing Biodiversity in Parks and Green Spaces 2010. DLRCC.
- River Dodder Biodiversity Study and Management Plan (2010), Mary Tubridy.
- Management of Knotweed along the River Dodder (2011), Mary Tubridy.
- **Bride's Glen Ecological Assessment** (2012), Denyer Ecology.
- **Otter Survey, Bride's Glen (2012)**, Scott Cawley.
- Assessment of the Nature Conservation Value of Ten Upland Sites in Dún Laoghaire-Rathdown (2011), Denyer Ecology.
- Cabinteely House Bat Survey (2010), Tina Aughney.
- Marlay House Bat Survey (2010), Tina Aughney.
- **St Helen's Wood Biodiversity Study** (2010), DLRCC.
- Ecological Guidance for Local Authorities and Developers (2014).
- Dún Laoghaire-Rathdown County Habitats Survey (2007), White Young Green.

4.3.3 Land Cover Mapping

The CORINE land cover mapping⁴ for Dún Laoghaire-Rathdown classifies land cover under various headings. Land cover categories which indicate lands that are likely to be most valuable to biodiversity are illustrated on Figure 4.7. These lands comprise areas of *Peat Bogs* along and near to the south-western boundary of the Plan area, *Green Urban Areas* to the north and an area of *Mixed Forest* at the southern boundary. Some of these land covers have come about as a result of human interaction with the landscape.

4.3.4 Designations

4.3.4.1 Introduction

There are a number of ecologically designated sites within and surrounding the Dún Laoghaire-Rathdown Plan area.

The County includes five Natura 2000 sites, four Special Areas of Conservation (SACs) and one Special Protection Area. An additional SAC is currently proposed for that portion of Dublin Bay, between Rockabill to Dalkey Islands.

The County also contains ten proposed Natural Heritage Areas. These non-statutory designations were proposed in 1995 but have not since been statutorily proposed or designated. (Nationally 148 bogland sites are designated as NHAs while a further 630 sites remain as proposed NHAs). According to the NPWS, statutory designation will occur on a phased basis over the coming years.

It is noted that some of the ecological sensitivities discussed below – and associated potential for environmental impacts – occur

⁴ CORINE Land Cover (CLC) is a map of the European environmental landscape based on interpretation of satellite images. Land cover is the observed physical cover, as seen from the ground or through remote sensing, including for example natural or planted vegetation, water and human constructions which cover the earth's surface. Because of the scale of the CORINE data and the method by which it was collected there are likely to be a number of inaccuracies at the local level. It is noted, however, that the land cover shown on the maps is generally accurate. The European Environment Agency, in conjunction with the European Space Agency, the European Commission and member countries is currently updating the CORINE land cover database.

beyond the fringes of the Plan area. They are included, however, to ensure that areas which could be impacted as a result of implementing the Plan are identified and assessed.

4.3.4.2 Candidate Special Areas of Conservation

Candidate Special Areas of Conservation (cSACs) have been selected for protection under the European Council Directive on the conservation of natural habitats and of wild fauna and flora (92/43/EEC) by the DECLG due to their conservation value for habitats and species of importance in the European Union. The sites are *candidate* sites because they are currently under consideration by the Commission of 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.

There are four cSACs within the Plan area to include South Dublin Bay cSAC, Ballyman Glen cSAC, Knocksink Wood cSAC and Wicklow Uplands cSAC.

Figure 4.8 maps cSACs and SPAs within the County while Figure 4.9 maps all cSACs and SPAs within 15km of the County as well as providing the name and site code for each.

The Zone of Influence of the Plan with respect to impacts upon ecology via surface waters upon ecological resources – including designated ecology – can be estimated to be all Water Management Units (WMUs) either wholly within or partially within the County, connected WMUs and connected estuarine and coastal water bodies. WMUs are mapped on Figure 4.8.

4.3.4.3 Special Protection Areas

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

The South Dublin Bay and River Tolka Estuary SPA lies to the north of the Plan area while the

Dalkey Islands SPA lies to the east and the Wicklow Mountains SPA lies to the south.

Figure 4.8 maps cSACs and SPAs within the County while Figure 4.9 maps all cSACs and SPAs within 15km of the County as well as providing the name and site code for each.

4.3.4.4 Natural Heritage Areas

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

Proposed NHAs in the Plan area including Booterstown Marsh pNHA, Ballybetagh Bog There are ten pNHA, Fitzsimon's Wood pNHA, Dingle Glen pNHA, Loughlinstown Wood pNHA and Dalkey Coastal Zone and Killiney Hill pNHA. South Dublin Bay SAC, Ballyman Glen SAC and Knocksink Wood SAC are also designated as pNHAs.

The Scalp and the Shanganagh Coastline are recognised as being of NHA status for their geological interest (see Section 4.5.3)

4.3.4.5 Ramsar Sites

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

The objective of a Ramsar site is the conservation of wetlands for wildfowl. While Ireland ratified the Ramsar Convention in 1984 there is no legal backing for Ramsar sites unless they are also Nature Reserves or SPAs and as such are protected by the Wildlife Acts 1976 and 2000 or the Birds or Habitats Directives.

Sandymount Strand/Tolka Estuary (Site No. 4024) was designated a Ramsar Site on 11 June 1996 and provides 654 hectares of Wetlands of International Importance. The exact boundaries of the Ramsar designation were unavailable from the Ramsar Sites Information Service however they are likely to

be similar to those of Sandymount Strand/Tolka Estuary SPA.

4.3.4.6 Register of Protected Areas

In response to the requirements of the Water Framework Directive a number of water bodies or parts of water bodies which must have extra controls on their quality by virtue of how their waters are used by people and by wildlife have been listed on Registers of Protected Areas (RPAs) (entries to the RPAs have been detailed further under Section 4.6.5).

4.3.4.7 Salmonid Waters

The main channel of the River Dargle is designated and protected as a Salmonid Water under the European Communities (Quality of Salmonid Waters) Regulations 1998 (SI No. 293 of 1998). Designated Salmonid Waters are capable of supporting salmon (*Salmo salar*), trout (*Salmo trutta*), char (*Salvelinus*) and whitefish (*Coregonus*). Although the River Dargle does not flow through the Plan area, a tributary of the Dargle does flow through the south eastern corner of the Plan area.

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 flows through the south east of the plan area. The Glencullen 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.

4.3.5 Existing Problems

Previous developments such as residential and commercial developments, along with the provision of transportation infrastructure, have resulted in loss of biodiversity and flora and fauna across the County however legislative objectives governing biodiversity and fauna were not identified as being currently conflicted with.

Both the current 2010-2016 County Development Plan and the new Draft Plan 2016-2022 include robust measures to contribute towards the protection of biodiversity and flora and fauna.

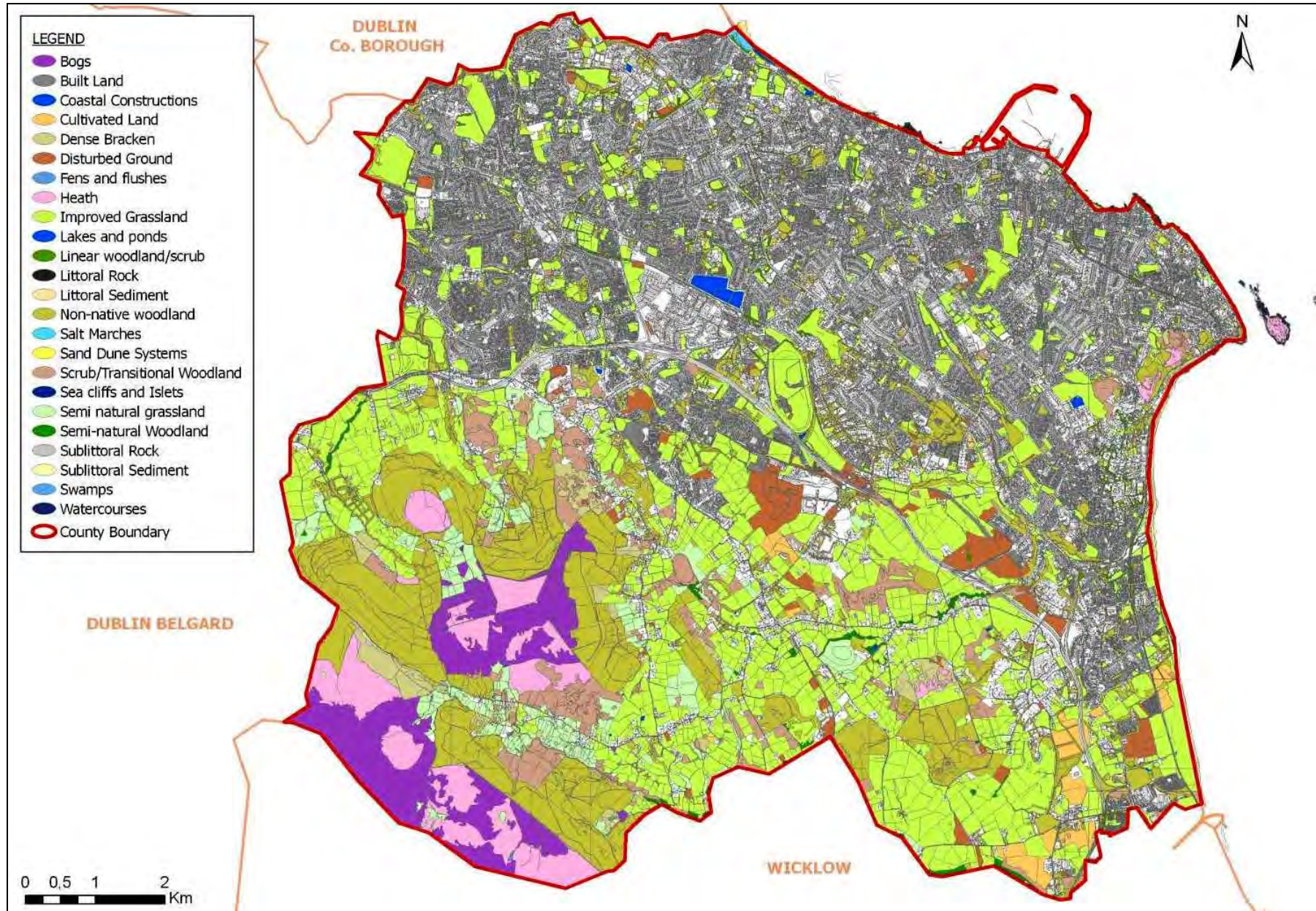


Figure 4.4 Habitats Survey - Level Two

Source: *White Young Green for Dún Laoghaire-Rathdown County Council (2007) Habitat Mapping Survey*

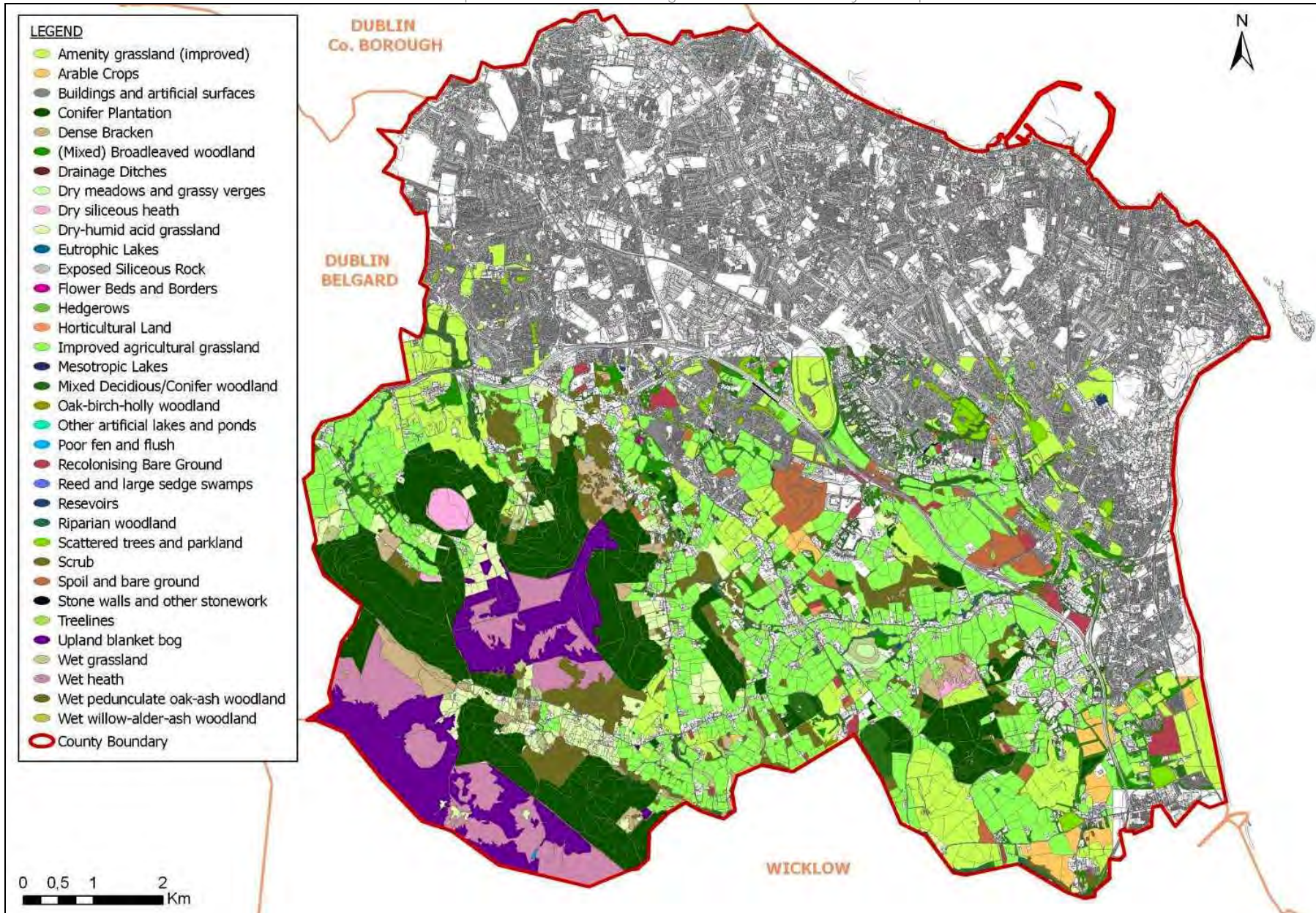


Figure 4.5 Habitats Survey - Level Three

Source: White Young Green for Dún Laoghaire-Rathdown County Council (2007) Habitat Mapping Survey

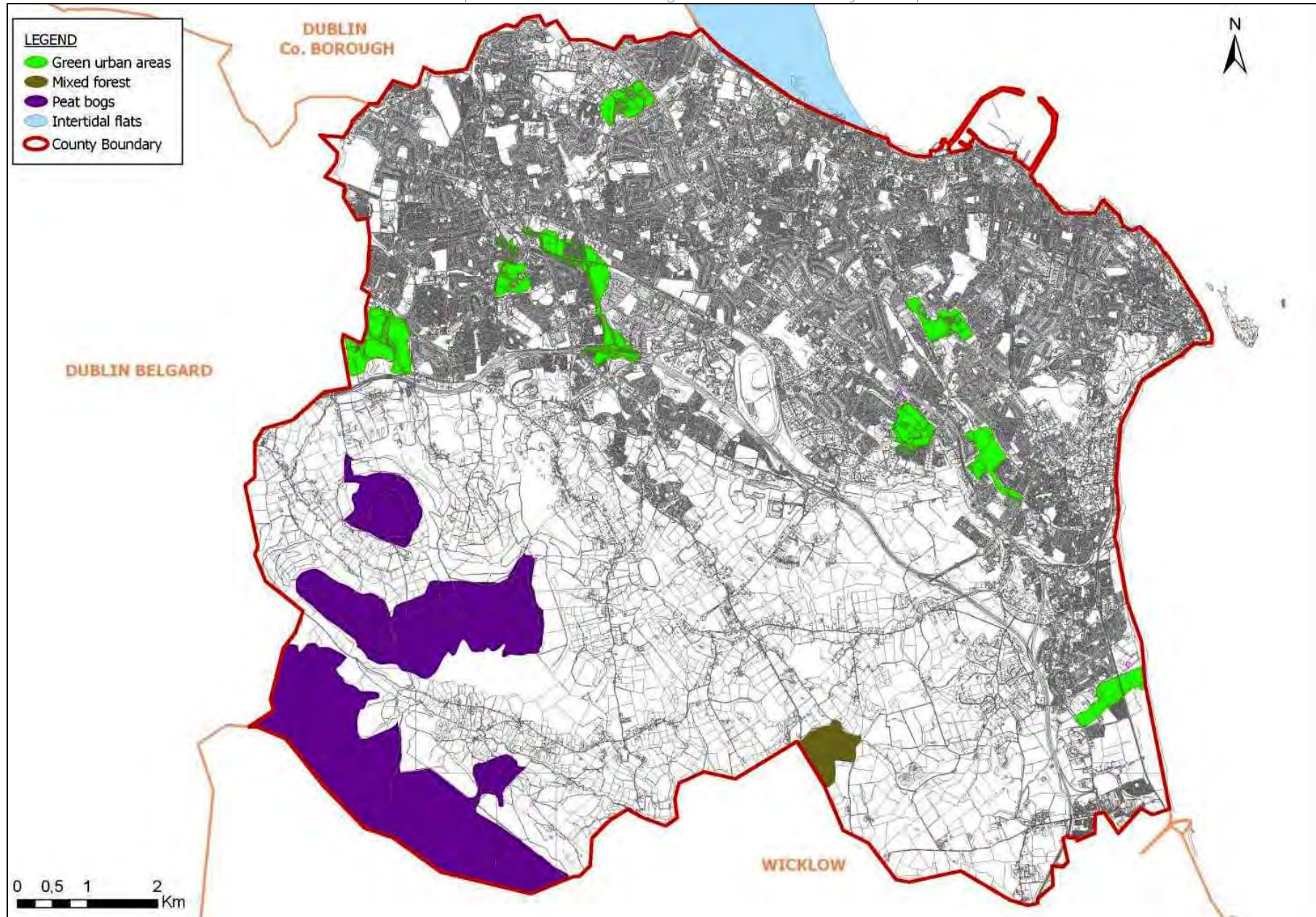


Figure 4.7 CORINE Land Cover Categories which indicate lands which are likely to be most valuable to biodiversity

Source: European Environment Agency (2012) CORINE Land Cover Mapping 2006

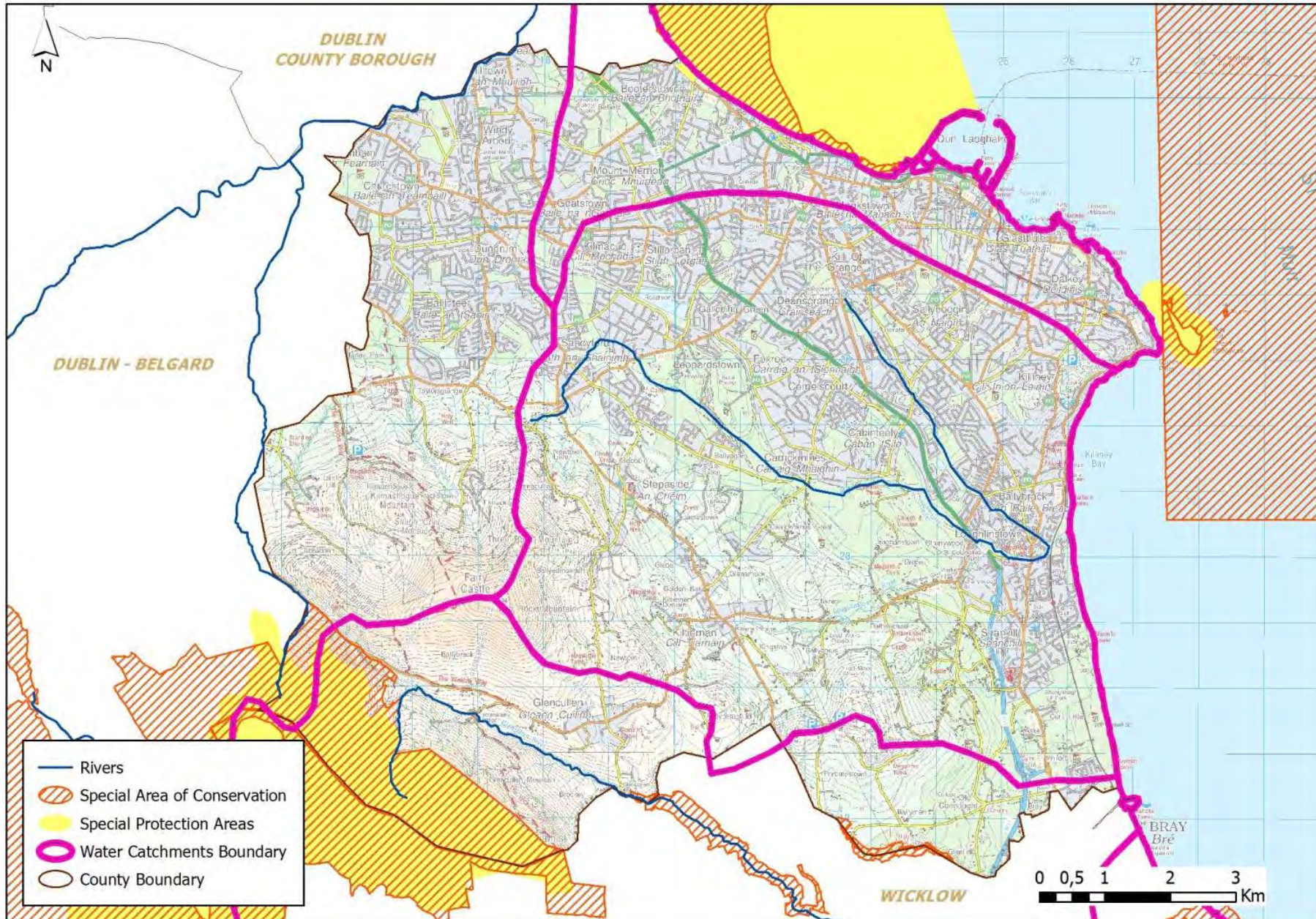


Figure 4.8 SPAs and cSACs with Water Management Units

Source: NPWS (datasets downloaded July, 2014)

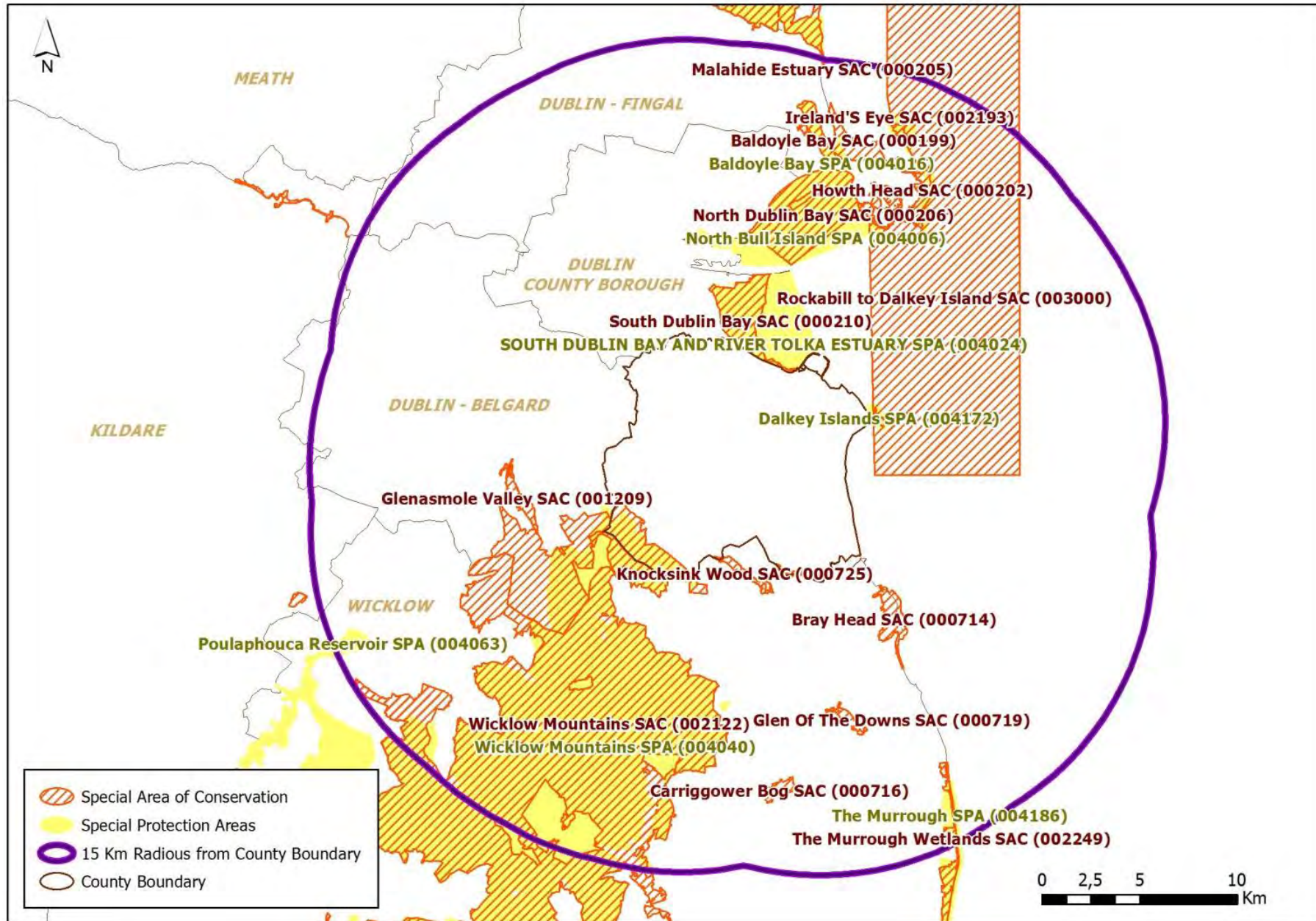


Figure 4.9 SPAs and cSACs with names and 15km Buffer Area

Source: NPWS (datasets downloaded July, 2014)

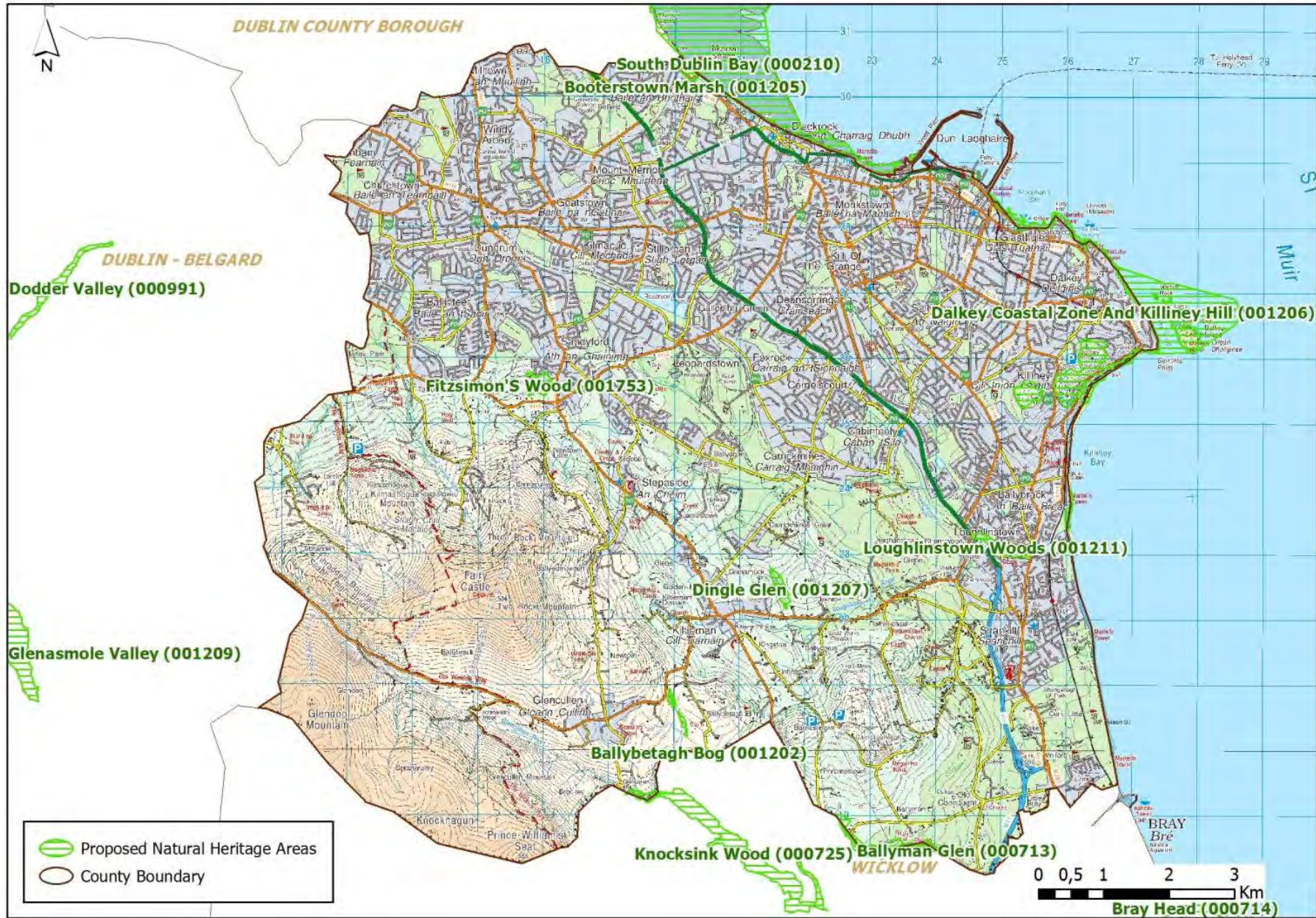


Figure 4.10 Proposed Natural Heritage Areas in the plan area

Source: NPWS (datasets downloaded July 2014)

4.4 Population and Human Health

4.4.1 Population

Dublin has experienced strong population growth in recent years. **Dublin's** population increased from 1.18 million persons in 2006 to 1.27 million persons in 2011, an increase of more than 83,000 people (7%). Dún Laoghaire-Rathdown has experienced a share of this growth after a period of relatively low growth in the previous decade.

Dún Laoghaire-Rathdown has a current population of 206,261. This represents 16% of **Dublin's** population. The population grew by 12,223 persons or 6.3%, between 2006 and 2011, at a time when the National increase was 8.2%. This was a significant increase on the previous 10 years where the County grew by just 4,039 persons.

The 2011 Census highlighted a high percentage of 14.5% in the over 65 age category compared to the national average of 11.7%. According to the CSO, 23% of houses in the County have one occupant. In contrast, Dún Laoghaire-Rathdown has a lower percentage of population in the 0-14 age bracket of 18.2% compared to the National average of 21.3%.

A key feature of population change in the County has been the uneven distribution of growth, with some areas experiencing strong population growth and other areas experiencing stagnation or decline. The large Glencullen District Electoral Division, for example, grew by 10,661 persons or 29%. Table 4.1 illustrates the population for each DED in the Plan area⁵.

Housing densities in the Plan area are high in the urban regions and comparatively low in the rural uplands. Spatial distribution of the population in the uplands is generally one-off housing, linear in parts. The majority of the population located in the lower-lying north, west, north, eastern and central parts of the Plan area.

Table 4.1 Population Change by DED
Source: CSO Census 2011

Ward	Census 2006	Census 2011	Population Change on Previous Census	% Population Change on Previous Census
Ballybrack	41,384	33,187	-8,197	-24.7%
Blackrock	29,455	30,990	1,535	4.95%
Dundrum	37,373	37,743	370	0.98%
Dún Laoghaire	40,182	40,852	670	1.64%
Glencullen	25,804	36,465	10,661	29.24%
Stillorgan	19,840	27,024	7,184	26.58%
Total	194,038	206,261	12,223	5.93%

4.4.2 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 Draft Plan.

4.4.3 Existing Problems

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.

Some areas within Dún Laoghaire-Rathdown are estimated as having 5-15% of homes to be above the reference level for Radon (mapping available at <http://www.epa.ie/radiation/radonmap>).

⁵ Source: CSO Census 2011

There is historic and predictive evidence of flooding in various locations across the County (see information on Strategic Flood Risk Assessment at Section 4.6.6). All recommendations made by the SFRA and SEA in relation to flood risk management have been integrated into the Draft Plan.

Compliance issues in relation to water services are detailed under Section 4.8.1.

4.5 Soil

4.5.1 Introduction

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

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

4.5.2 Soil Types

Figure 4.11 shows the distribution of soil types across the Plan area. The biodiversity, flora and fauna detailed under Section 4.3 are facilitated by these soils. *Urban soils* make up the northern, most built-up section of the Plan area. The majority of the Plan area is covered by *grey brown podzols* with areas of *brown podzolics*, *peaty podzols* and *litosols* and *outcropping rock* existing as the Plan area extends to the south west.

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. *Urban soils* have a combination of characteristics that differ from natural soils. These characteristics are due to alterations in both physical and chemical soil properties that cause long term deviation from the natural state.

Grey brown podzolic soils are usually formed from a calcareous parent material, which counteracts the effects of leaching. Because of this, the podzolisation process is restricted and the principal materials translocated down the soil profile are the clay particles themselves. The lighter texture *grey brown podzolics* are good all-purpose soils, while the heavier textured members are highly suited to pasture production, responding well to manurial and management practices.

Brown podzolic soils are somewhat similar to the *podzols* and have been formed under the influence of the same process. They are less depleted than the *podzols* and the surface layer contains organic matter is intimately mixed with mineral matter. Because of their desirable physical characteristics, *brown podzolics* are often devoted extensively to cultivated cropping and pasture production. Their inherent low nutrient status is easily overcome by addition of lime and fertiliser.

Litosols are skeletal stony soils, usually overlying solid or shattered bedrock. They are often associated with *podzols* at higher elevations. Generally such soil areas have bare rock outcropping at frequent intervals and many also have steep slopes. Their use-range is usually limited to rough grazing.

4.5.3 Sites of Geological Interest

Sites of Geological Interest within the County are mapped on Figure 4.12 and listed as follows: Three Rock Mountain; Ballybetagh Bog; The Scalp; Ballycorus; Killiney Hill; Dalkey Hill; Killiney Adit; White Rock, Killiney; Killiney Bay (Bray Harbour to Killiney Station); Blackrock Breccia; Dalkey Island; and Shankill.

4.5.4 Contaminated Soil

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. Both the existing 2010-2016 Plan and the Draft 2016-2022 Plan require that where brownfield redevelopment is proposed, adequate and appropriate investigations are carried out into the nature and extent of any soil and groundwater contamination and the risks associated with site development work.

4.5.5 Existing Problems

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

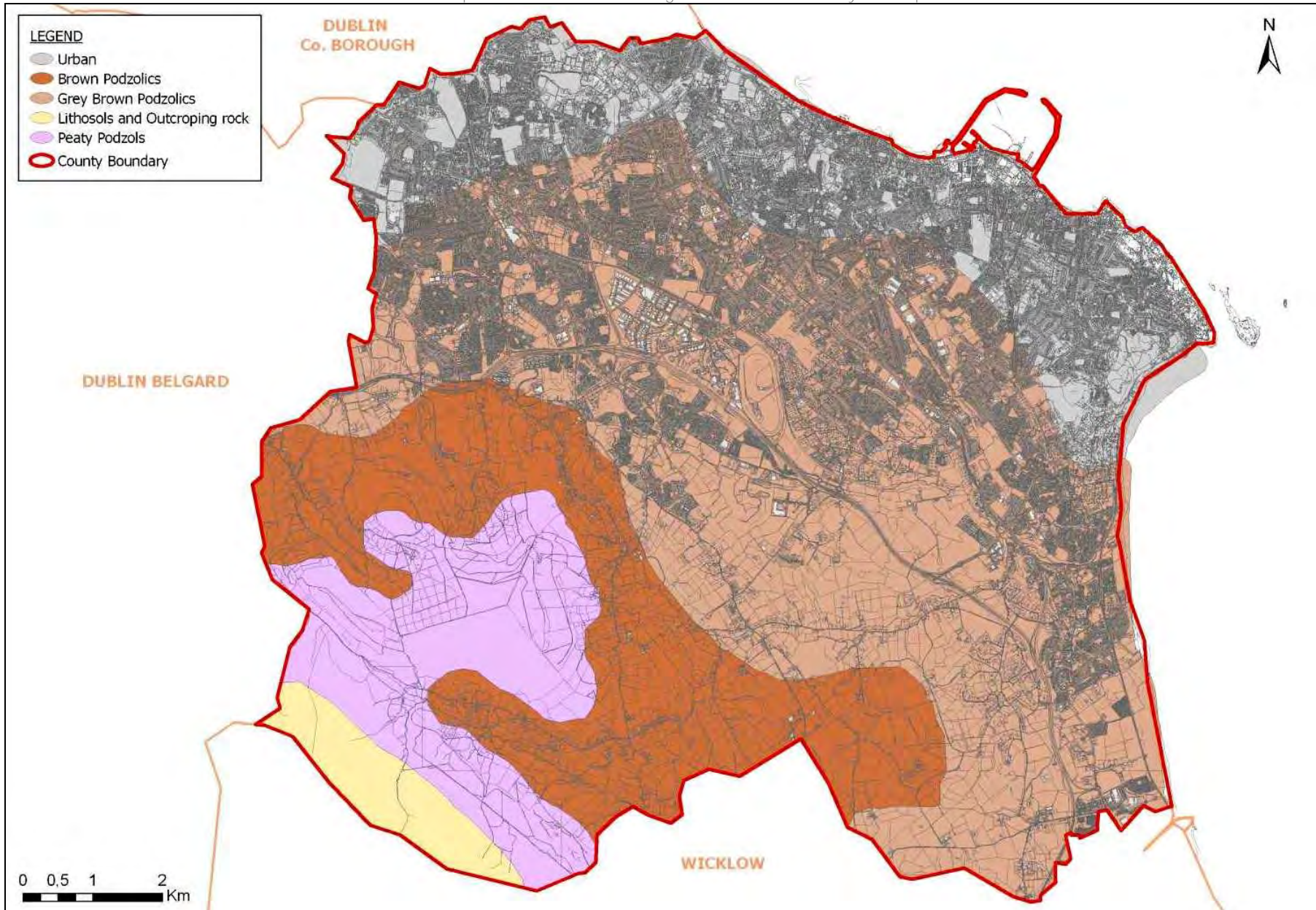


Figure 4.11 Soil Types

Source: Teagasc, GSI, Forest Service & EPA (2006) *Soil Type*

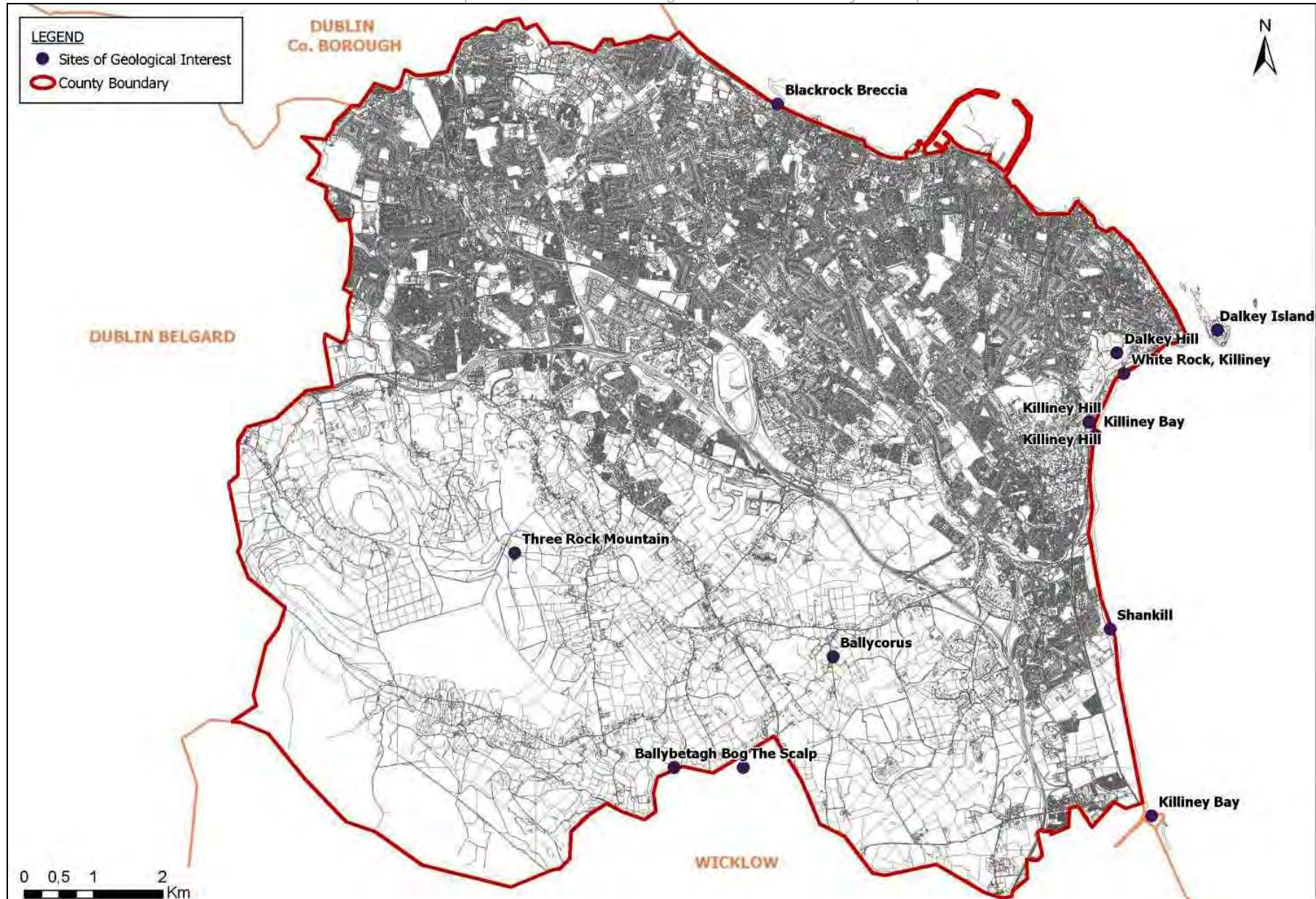


Figure 4.12 Sites of Geological Interest

Source: Dún Laoghaire-Rathdown County Council (2009) *Sites of Geological Interest*

4.6 Water

4.6.1 Potential Pressures on Water Quality

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

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

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

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

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

Structural alterations such as river straightening; construction of embankments, weirs, dams, port facilities and dredging can create conditions such that a water body is no longer able to support the natural ecology which would have existed prior to such modifications. These pressures are also referred to as morphological pressures.

4.6.2 The Water Framework Directive

4.6.2.1 Introduction and Requirements

Since 2000, Water Management in the EU has been directed by the Water Framework Directive 2000/60/EC (WFD). The WFD requires that all Member States implement the necessary measures to prevent deterioration of the status of all waters - surface, ground, estuarine and coastal - and protect, enhance and restore all waters with the aim of **achieving "good status" by 2015**. All public bodies 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 by 2015.

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 relevant river basin management plan.

4.6.2.2 River Basin Districts and Water Bodies

For the purpose of implementing the WFD, Ireland has been divided into eight river basin districts or areas of land that are drained by a large river or number of rivers and the adjacent estuarine/coastal areas. The management of water resources will be on these river basin districts. Dún Laoghaire-Rathdown falls within the Eastern River Basin District (EBRD)

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

4.6.2.3 River Basin Management Plan

Local Authorities, including Dún Laoghaire-Rathdown County Council, have prepared the Eastern River Basin Management Plan which is being implemented through, inter alia, the County Development Plan, in order to help

protect and improve waters in the County and wider RBD. The Management Plan provides specific policies for individual river basins in order to implement the requirements of the WFD.

4.6.3 Surface Water

4.6.3.1 Introduction

The main rivers within the Plan area are the Loughlinstown River, the Glencullen River, the Little Dargle River and the River Dodder.

The Loughlinstown (or Shanganagh) River has a number of tributaries which merge in Loughlinstown. The most southerly of these tributaries rises in Kiltarnan near Two Rock Mountain. The next of these tributaries rises to the north of this, near Stepside and flows through Carrickmines, a number of smaller streams merge with it on the way. Another tributary rises in Cornelscourt and flows to the south east. A final stream rises in Deansgrange and flows to the south east to meet the Loughlinstown River just before it enters the sea at Killiney Bay.

The Glencullen River rises on Glendoo Mountain in Dún Laoghaire-Rathdown and flows to the south east through Glencullen before entering County Wicklow where it merges with the Dargle River which flows into the sea at Bray.

The Little Dargle River also rises in Three Rock Mountain. It flows to the north through Ballinteer where it merges with another stream. It continues to flow to the north where it merges with the Dodder at Rathfarnham, in the north west of the Plan area.

The River Dodder rises in the Dublin Mountains and in its upper reaches it forms a reservoir system which is an integral part of the water supply to Dublin. It flows down through Tallaght, Rathfarnham, Donnybrook and Ballsbridge before discharging into the Liffey Estuary at Ringsend. The lower section of the river is tidal up to Ballsbridge.

Dún Laoghaire-Rathdown includes parts of three Water Management Units: the Dargle; the Dodder; and Shanganagh. Figure 4.8 shows the boundaries of these Water Management Units.

The Zone of Influence with respect to water resources can be estimated to be all WMUs either wholly within or partially within the County, connected WMUs, connected estuarine and coastal water bodies and all connecting bodies of groundwater.

4.6.3.2 WFD Surface Water Status

The WFD defines '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, **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.

Figure 4.13 illustrates currently available from the EPA on the status of rivers within and surrounding the Plan area. These status classifications are contributed towards by the morphological pressures found along these often urban waterbodies such as culverts, river straightening and bed/bank reinforcement.

The River Dodder is identified as being of *poor* status along the northern boundary of the Plan area.

The Glencullen River is identified as being of *good* status in the south of the Plan area.

The Carrickmines Stream is identified as being of *moderate* status before it joins the Loughlinstown (or Shanganagh) River at Loughlinstown. The Loughlinstown River is identified as being of *good* status upstream of Loughlinstown and of *poor* status downstream

of Loughlinstown, after it joins with the Carrickmines Stream.

Figure 4.14 illustrates currently available from the EPA on the status of coastal waters within and surrounding the Plan area.

Coastal waters are generally of *moderate* status to the north of Sorrento Point and *high* status to the south of Sorrento Point. The *moderate* status to the north of Sorrento Point is contributed towards by the morphological pressures found along this urban coastline including built structures, port tonnage and coastal defences. An area to the east of Sorrento Point is not monitored.

4.6.3.3 Quality of Rivers

River water quality within the County is monitored by the EPA at a number of locations. *Good* status as defined by the WFD equates to approximately *Q4* in the national biological classification scheme of rivers as set out by the EPA.

Figure 4.15 maps the most recent Q-value data (post 2010) for various monitoring locations within the County.

The Dodder River in the north of the Plan area at Miltown is indicated as being of *moderate* status (*Q3-4*).

The Glencullen River in the south of the Plan area at Boranaraltry is indicated as being of *high* status (*Q4-5, Q5*).

The Carrickmines Stream is indicated as being of *moderate* status (*Q3-4*) before it joins the Loughlinstown (or Shanganagh) River at Loughlinstown. The Loughlinstown River is indicated as being of *good* status (*Q4*) both upstream and downstream of Loughlinstown. The Kill-O-The-Grange Stream which flows into the Loughlinstown River south of Ballybrack is indicated in two locations as being of *poor* status (*Q2-3, Q3*).

4.6.3.4 Quality of Coastal and Bathing Waters

The Assessment of Trophic Status of Estuaries and Bays in Ireland (ATSEBI) System is used by the EPA in order to classify the quality status of transitional waters. *Good* status for coastal waters as defined by the WFD equates to approximately *Unpolluted* status in the Assessment of Trophic Status of Estuaries and Bays in Ireland (ATSEBI).

Figure 4.16 maps coastal water quality adjacent to the County. All Coastal Waters are classified as being *Unpolluted* – they do not breach any of the criteria.

Mandatory and Guide Values are set out for bathing waters in the 2006 EU Bathing Water Directive and transposing Regulations. Mandatory Values are values which must be observed if the bathing area is to be deemed compliant with the Directive. Compliance with Guide Values exceeds guidance with Mandatory Values and can be regarded as quality objectives which bathing sites should endeavour to achieve. Quality of bathing water in the Plan area is classified for years with available data from 2010 on Table 4.2. All bathing waters have complied with the Mandatory Values during this period.

Table 4.2 Bathing Water Quality by Year

	Merrion Strand	Seapoint	Killiney	Bray
2013	Mandatory Values	Guide Values	Guide Values	Mandatory Values
2012	Mandatory Values	Guide Values	Guide Values	Mandatory Values
2011	Guide Values	Guide Values	Guide Values	Guide Values
2010	Guide Values	Guide Values	Guide Values	Mandatory Values

Source: EPA Bathing Water Quality (Various)

4.6.4 Ground Water

4.6.4.1 Introduction

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

4.6.4.2 WFD Groundwater Status

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 EPA has classified groundwater

status in Dún Laoghaire-Rathdown as *good* as shown on Figure 4.17.

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. Both the existing 2010-2016 Plan and the Draft 2016-2022 Plan require that where brownfield redevelopment is proposed, adequate and appropriate investigations are carried out (through the Development Management process) into the nature and extent of any soil and groundwater contamination and the risks associated with site development work.

4.6.4.3 Groundwater Productivity and Vulnerability

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

Groundwater Vulnerability is a term used to represent the intrinsic geological and hydrogeological characteristics that determine the ease with which groundwater may be contaminated by human activities. Groundwater vulnerability maps are based on the type and thicknesses of subsoils (sands, gravels, glacial tills (or boulder clays), peat, lake and alluvial silts and clays), and the presence of karst features. Groundwater is most at risk where the subsoils are absent or thin and, in areas of karstic limestone, where surface streams sink underground at swallow holes⁶.

Figure 4.18 maps groundwater vulnerability for the County. Much of the plan area is classified as being of high vulnerability with certain areas varying from low to extreme vulnerability.

Groundwater Productivity rates the value of **the groundwater resource**. Ireland's entire land surface is divided into nine aquifer categories. The Plan area is divided into two main classifications as seen on Figure 4.19. The north west and south east portions of the Plan area are underlain by a locally important sand/gravel aquifers this aquifer is capable of yielding enough water to boreholes or springs

⁶ Source: Geological Survey of Ireland (2014) Metadata

to supply villages, small towns or factories. The remainder of the Plan area is underlain by poor bedrock aquifers, which are generally unproductive except for local zones.

4.6.5 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).

The waters listed on the RPA are listed on and are mapped on Figure 4.20.

Table 4.3 Entries to the Registers of Protected Areas

Qualifying Value	Water Body
RPA Species SPA	Sandymount Strand/Tolka Estuary
RPA Habitat Rivers	Dargle (River)
RPA Drinking Water Rivers	Loughlinstown (River)
RPA Beaches	Seapoint
RPA Beaches	Killiney
RPA Beaches	Sandymount Strand
RPA Beaches	Merrion Strand
RPA Drinking Water Ground Water	All underlying GW

4.6.6 Flooding

Appendix 13 to the Draft County Development Plan contains the findings of a Strategic Flood Risk Assessment (SFRA) which has been undertaken by the Council in response to requirements contained in *The Planning System and Flood Risk Management*

Guidelines for Planning Authorities (DEHLG/OPW, 2009).

The purpose of the SFRA is to provide sufficient information to allow sound planning decisions to be made on sites at risk of flooding over the lifetime of the next County Development Plan 2016-2022 and also to ensure that Elected Members have the necessary information in coming to decisions on the Draft Plan with respect to flood risk and its management.

Flooding is an environmental phenomenon which, as well as having caused economic and social impacts, could in certain circumstances pose a risk to human health. The existence of flood risk within the County is illustrated by the mapping of locations of the most significant recent flooding events - accessible from the Office of Public Works (OPW) National Flood Hazard Mapping website - which is provided at Figure 4.21 (the draft Catchment Flood Risk Assessment and Management (CFRAM) Study maps are not yet in the public domain, Dec 2014).

The OPW is the lead Authority on flooding in the Country and in 2011 they commenced a National CFRAM programme. CFRAM studies are currently being carried out for the Eastern Region - which includes Dún Laoghaire-Rathdown - and these studies have been used as the basis of this Strategic Flood Risk Assessment. The Eastern CFRAM studies are still being finalised and are not yet in the public domain (December 2014). The Dodder River, which forms part of the Eastern Region CFRAM, was, however the subject of an earlier pilot project and the maps in relation to the Dodder CFRAM are consequently in the public domain. At a meeting with the OPW and the Department of Environment, Community and Local Government in February 2014 Dún Laoghaire-Rathdown were advised to progress with SFRA using the information that was available although this information is not yet publicly available. The SFRA undertaken has progressed on this basis using maps dating from June 2014. The Council are still liaising with the OPW (as part of the ongoing CFRAM Study process) on a number of specific areas, which have been shown to be subject to flooding.

The SFRA contains detailed mapping of certain areas which are subject to elevated levels of flood risk, including for areas at Dundrum, Shankill and Old Conna. These maps, in their

current form, remain subject to an unknown amount of change before they can be robustly relied upon for any decision making processes.

4.6.7 Existing Problems

Subject to exemptions provided for by Article 4 of the WFD⁷, based on available water data, certain surface water bodies within the County will need improvement in order to comply with the objectives of the WFD:

- The River Dodder is identified as being of *poor* status along the northern boundary of the Plan area. In the north of the Plan area at Miltown it is indicated as being of *moderate* status (Q3-4).
- The Carrickmines Stream is identified as being of *moderate* status (Q3-4) before it joins the Loughlinstown (or Shanganagh) River at Loughlinstown.
- The Loughlinstown River is identified as being of *poor* status downstream of Loughlinstown, after it joins with the Carrickmines Stream.
- The Kill-O-The-Grange Stream which flows into the Loughlinstown River south of Ballybrack is indicated in two locations as being of *poor* status (Q2-3, Q3).

Note that these classifications in the County are contributed towards by the morphological pressures found along these often urban waterbodies such as culverts, river straightening and bed/bank reinforcement.

- Coastal waters are generally of *moderate* status to the north of Sorrento Point.

Note that this *moderate* status classification is contributed towards by the morphological pressures found along this urban coastline including built structures, port tonnage and coastal defences.

The Eastern RBD Management Plan and associated Programme of Measures include provisions to help ensure that these water bodies meet the objectives of the WFD. The Draft Plan will contribute towards the

⁷ 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 relevant river basin management plan.

achievement of the objectives of this Management Plan.

There is historic and predictive evidence of flooding in various locations across the County. All recommendations made by the SEA and SFRA in relation to flooding risk management have been integrated into the Draft Plan.

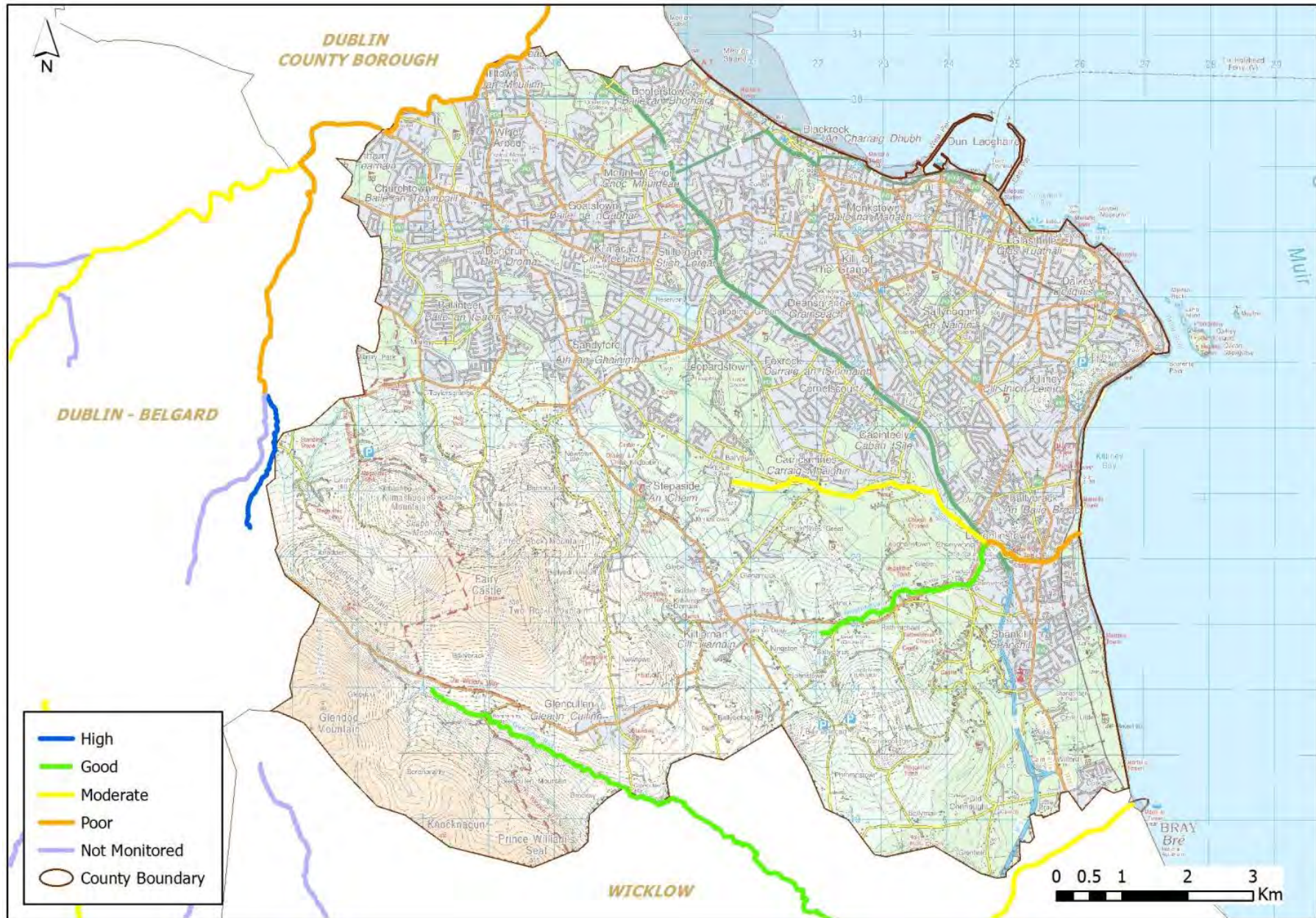


Figure 4.13 Status of Rivers

Source: EPA (2011)

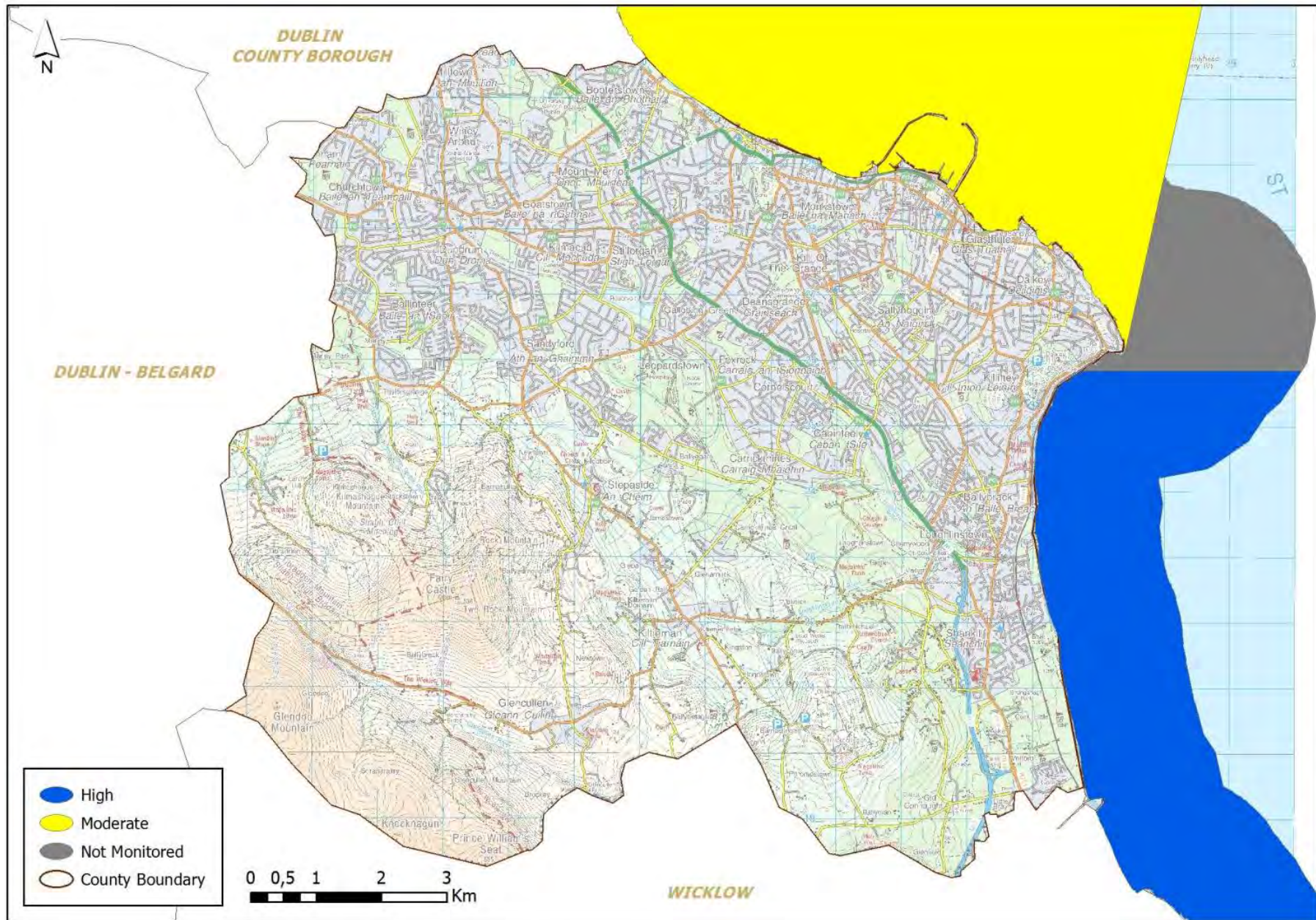


Figure 4.14 Status of Coastal Waters

Source: EPA (2011)

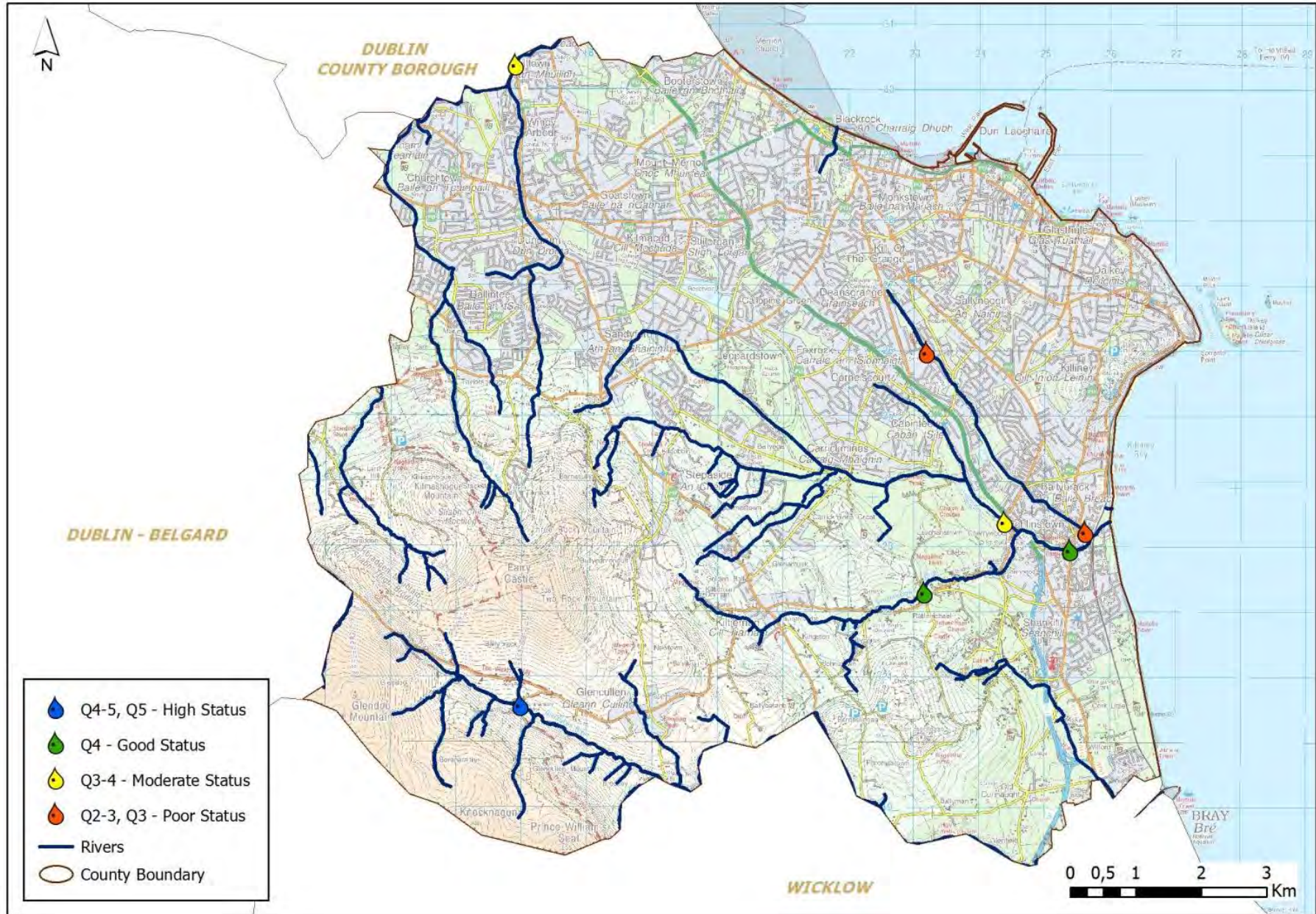


Figure 4.15 Q-Values (Biotic Index Ratings) at Points on Rivers

Source: EPA (various post 2010)

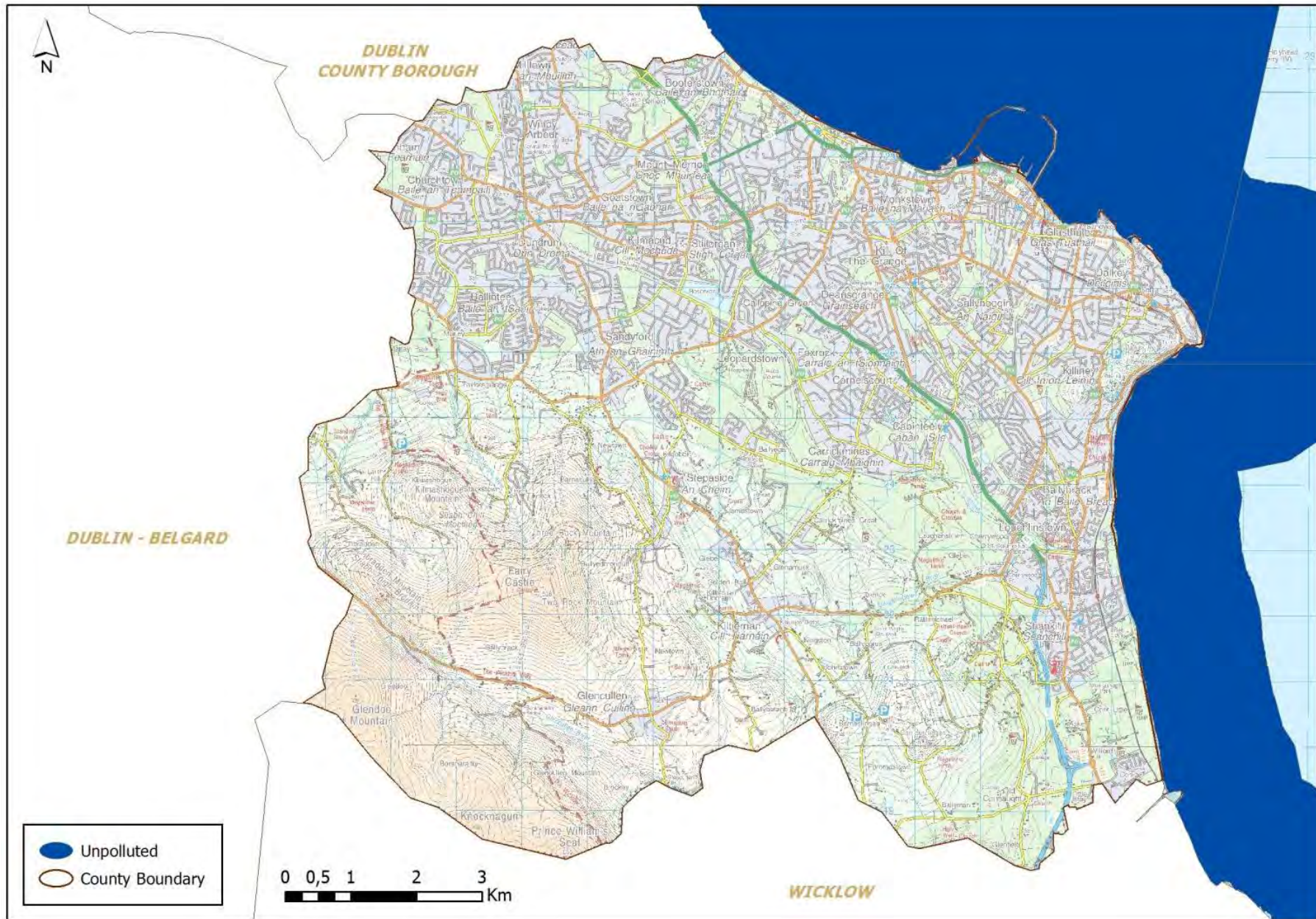


Figure 4.16 Coastal Water Quality

Source: EPA (2007-2009)



Figure 4.17 Groundwater Status

Source: EPA (2011)

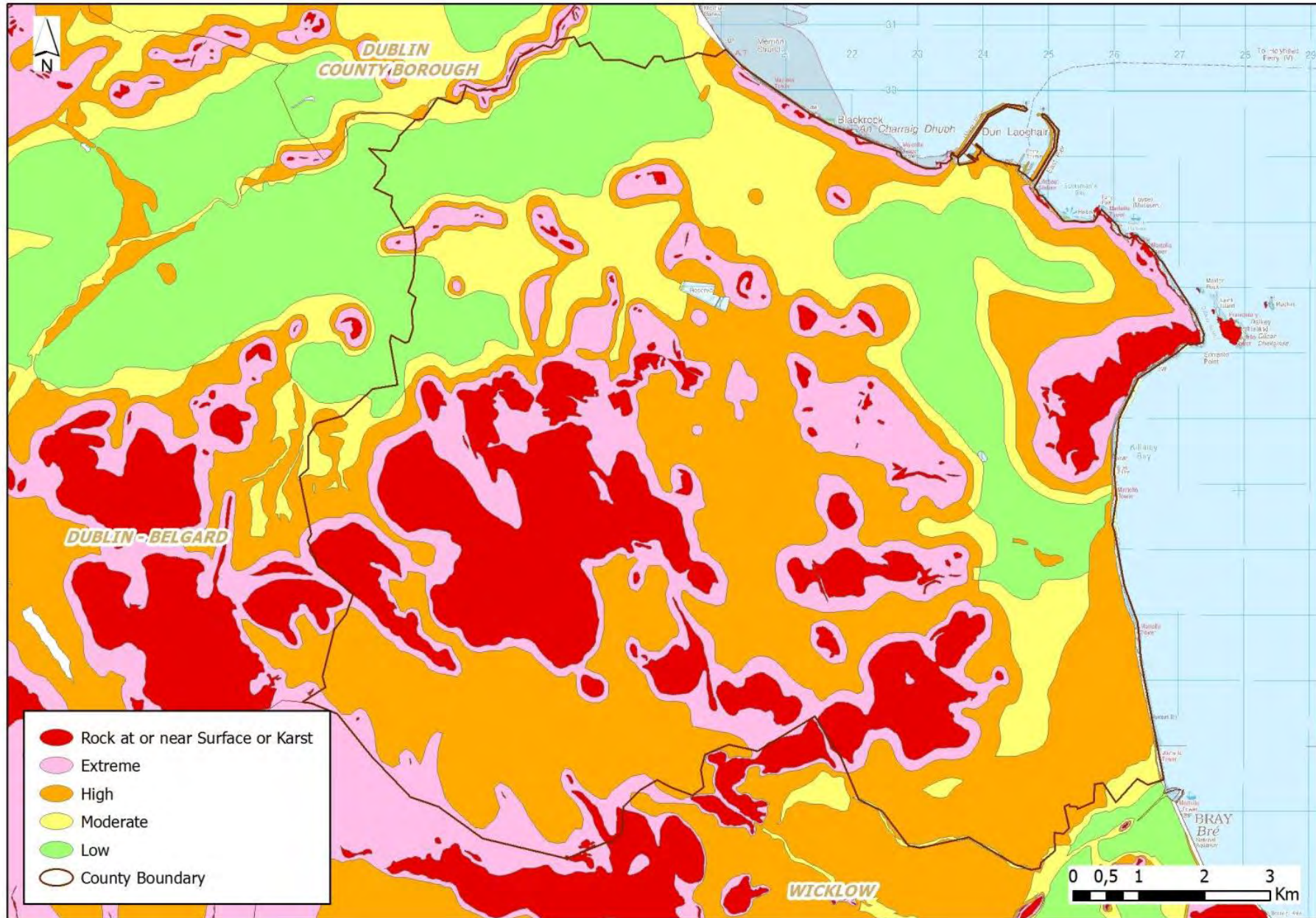


Figure 4.18 Groundwater Vulnerability

Source: GSI (2006)

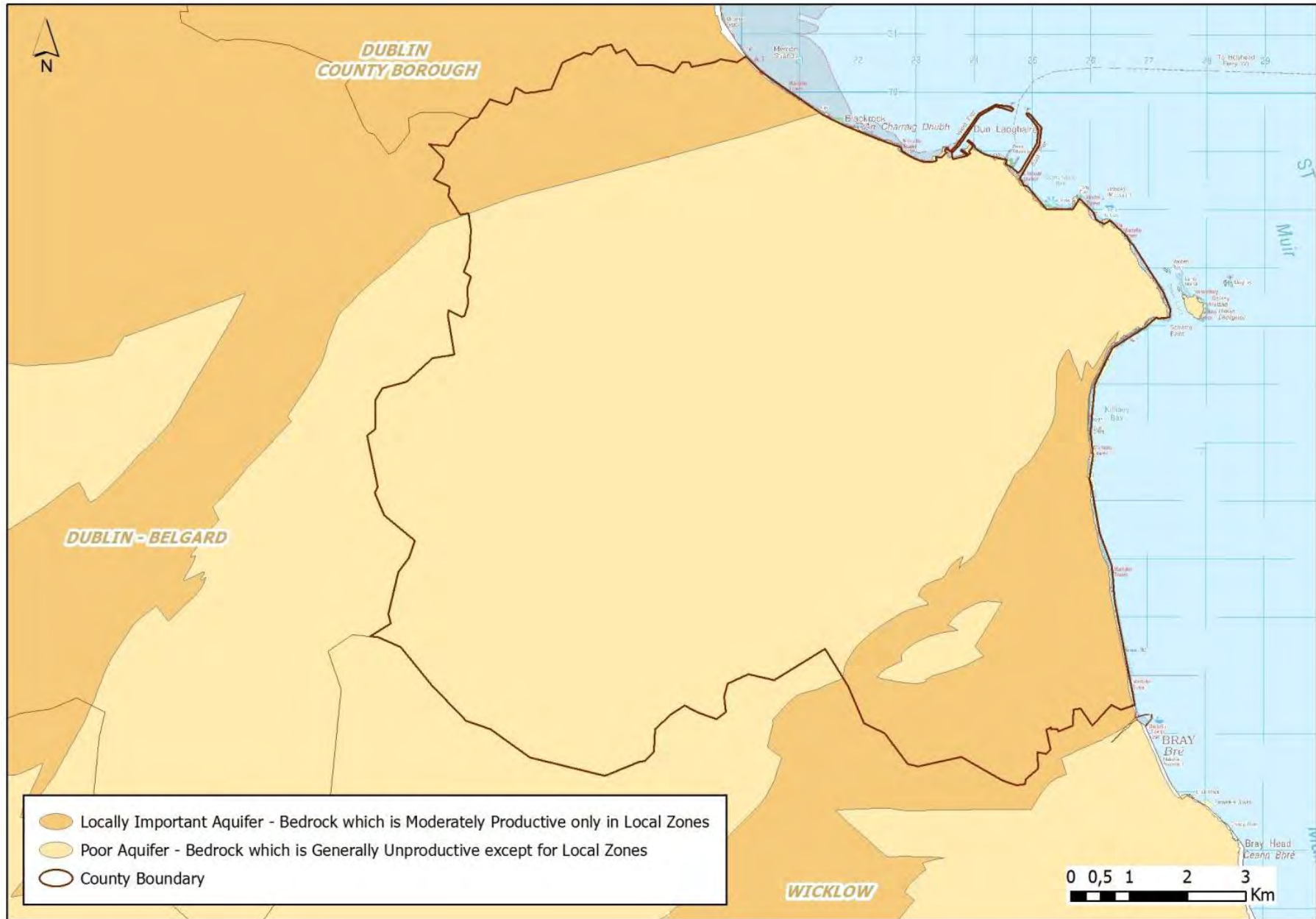


Figure 4.19 Groundwater Productivity

Source: GSI (2006)

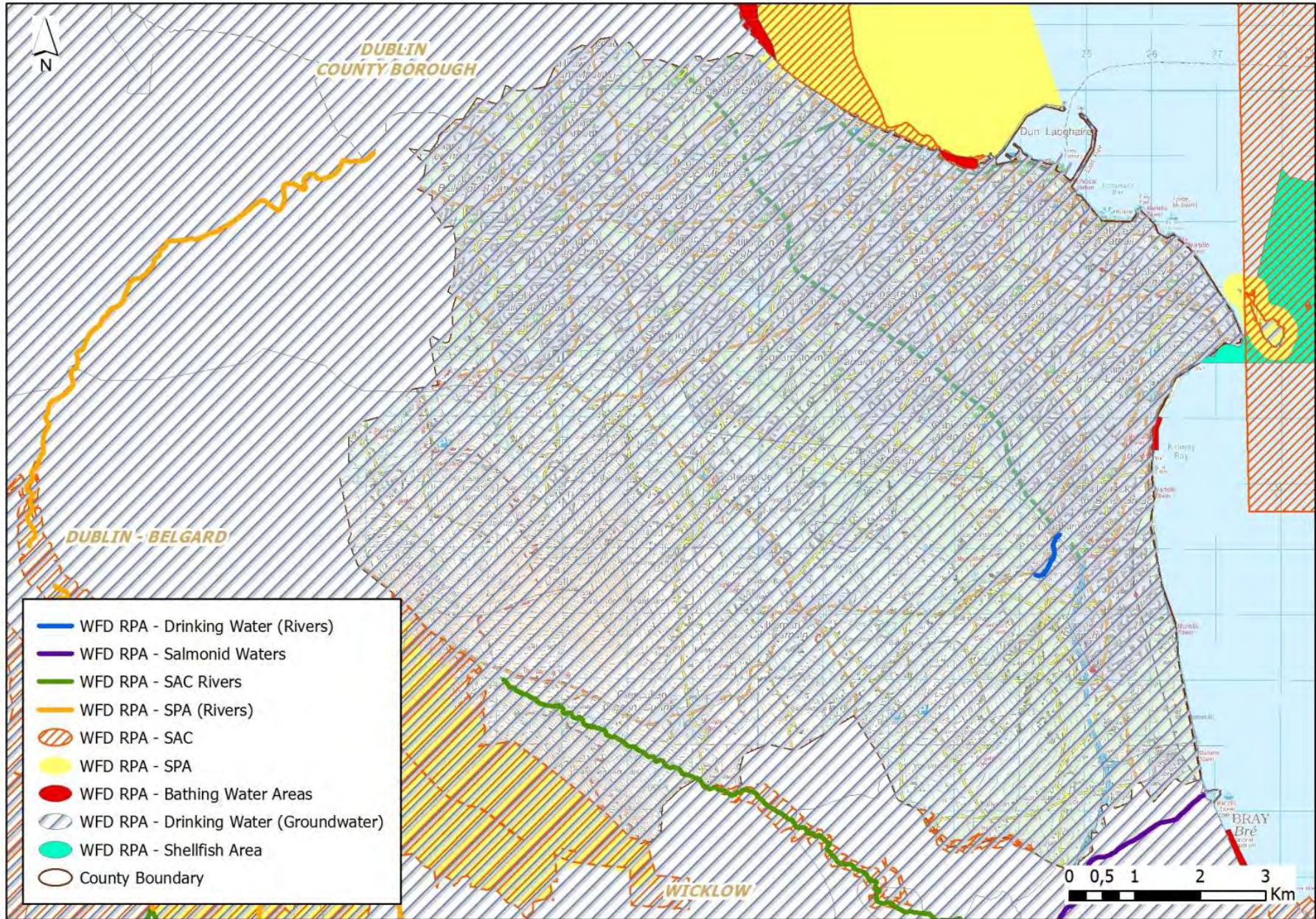


Figure 4.20 Entries to the WFD Registers of Protected Areas

Source: EPA (2011)

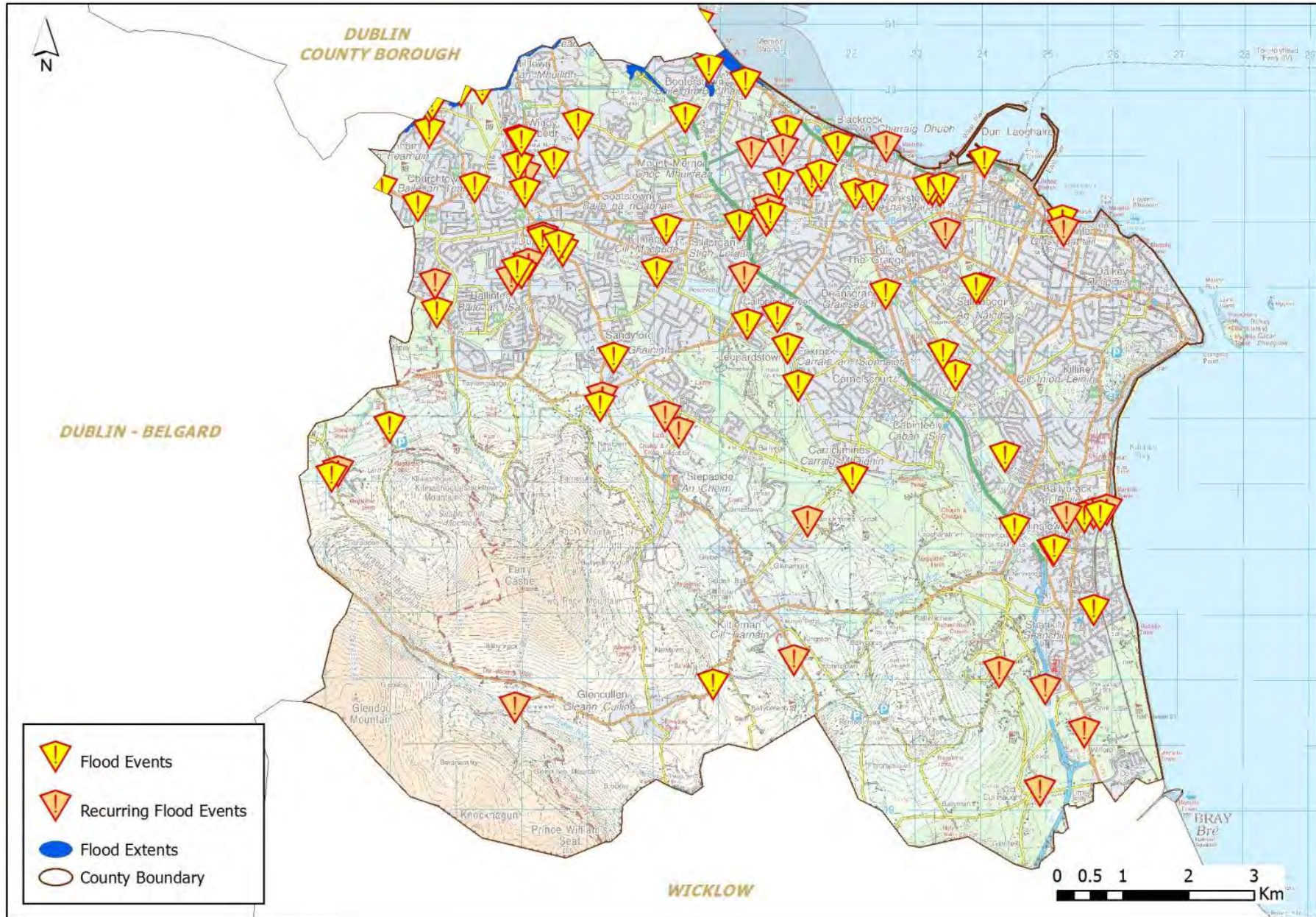


Figure 4.21 OPW Flood Events

Source: OPW (various)

4.7 Air and Climatic Factors

4.7.1 Ambient Air Quality

4.7.1.1 Introduction and Legislation

In order to protect human health, vegetation and ecosystems, EU Directives set down air quality standards in Ireland and the other Member States for a wide variety of pollutants. These pollutants are generated through fuel combustion, in space heating, traffic, electricity generation and industry and, in sufficient amounts, could affect the well-being of the 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 under the Air Quality Framework Directive 1996 as transposed into Irish law under the Environmental Protection Agency Act 1992 (Ambient Air Quality Assessment and Management) Regulations 1999 (SI No. 33 of 1999).

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

4.7.1.2 Air Zones

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 (SI No. 271 of 2002). The main areas defined in each zone are:

- Zone A: Dublin Conurbation.
- Zone B: Cork Conurbation.
- Zone C: 21 Other cities and large towns including Galway, Limerick, Waterford, Clonmel, Kilkenny, Sligo, Drogheda, Wexford, Athlone, Ennis, Bray, Naas, Carlow, Tralee and Dundalk.
- Zone D: Rural Ireland, i.e. the remainder of the State - small towns and rural areas

of the country - excluding Zones A, B and C.

Dún Laoghaire-Rathdown falls into zone A. Current air quality in Zone A is "good".

4.7.1.3 Current Monitoring Sites

There are three current air quality monitoring sites in Dún Laoghaire-Rathdown.

The site on the Glenegeary Road in Dún Laoghaire measures oxides of nitrogen. This site is operated by Fingal County Council on behalf of Dún Laoghaire-Rathdown County Council. Monitoring is done using continuous monitors for nitrogen oxides. Emissions from traffic are the main source of nitrogen oxides in Ireland along with electricity generating stations and industry. Levels in Ireland are moderate but have increased due to the growth in traffic numbers.

The site at the EPA Inspectorate, Richview, Clonskeagh monitors ozone levels. Monitoring is carried out using a continuous monitor for ozone. Ozone is a natural component of the atmosphere. Most ozone is found in the stratosphere, between 12km and 50km above sea level, and in the troposphere, just above the surface of the Earth. Levels of ozone in Ireland are moderate.

The site at Rosemount, Dublin commenced monitoring for metal concentrations including lead, nickel, arsenic and cadmium in 2009. The metals deposition sampler is located on the grounds of University College Dublin, Dublin 14. Lead, arsenic, cadmium, nickel and mercury are toxic heavy metals which can be found in the air. They impact on health through inhalation of particulate matter (PM10) containing the metals or, in the case of mercury, direct inhalation of vapour. Their sources are primarily fossil fuel combustion, industrial processes such as metal-plating, mining, smelting, the production of batteries, plastics and pigments and other sources⁸.

The EPA operates an Air Quality for Health Index (AQIH). This is a number from 1 to 10 that indicate what air quality currently in any given region and whether it might affect health. The index is calculated based on the latest available measurements of PM10, sulphur dioxide, nitrogen dioxide and ozone in Zone A.

⁸ EPA (2012) *Air Quality in Ireland 2011*

The EPA's (2013) *Air Quality in Ireland 2012* identifies that air quality in Ireland continues to be good, with no exceedances for the pollutants measured in 2012.

4.7.2 Climatic Factors

The key issue involving the assessment of the effects of implementing the plan on climatic factors relates to greenhouse gas emissions arising from transport. It is noted that the Draft Plan contains a number of actions which respond to potential threats to environmental components arising from a changing climate.

Flooding - see Section 4.6.6 - is influenced by climatic factors and the implications of climate change with regard to flood risk have been integrated into the recommendations which have been inserted into the Draft Plan. There are emerging objectives relating to climate adaptation and there is likely to be future Guidance for climate change proofing of land use plan provisions as is flagged in the National Climate Change Adaptation Framework (DECLG, 2012). Some of these objectives might relate to green infrastructure which can achieve synergies with regard to the following:

- Provision of open space amenities;
- Sustainable management of water;
- Protection and management of biodiversity;
- Protection of cultural heritage; and
- Protection of protected landscape sensitivities.

Ireland's emissions profile has changed considerably since 1990, with the contribution from transport more than doubling and the share from agriculture reducing since 1998. Travel is a source of:

1. Noise;
2. Air emissions; and
3. Energy use (39% of Total Final Energy Consumption in Ireland in 2012 was taken up by transport, the largest take up of any sector)⁹.

Land-use planning contributes to what number and what extent of journeys occur. By addressing journey time through land use planning and providing more sustainable modes and levels of mobility, noise and other

⁹ Sustainable Energy Ireland (2014) *Energy in Ireland 1990 – 2012*

emissions to air and energy use can be minimised. Furthermore, by concentrating populations, greenfield development - and its associated impacts - can be minimised and the cost of service provision can be reduced.

Between 2008 and 2011, Ireland's greenhouse gas emissions decreased across all sectors due to the effects of the economic downturn with emissions falling by 15.2% between 2008 and 2011. However, 2012 saw emissions rise by 1.2% when compared with 2011¹⁰.

Maximising sustainable mobility will help Ireland meet its emission target for greenhouse gases under the 2020 EU Effort Sharing target which commits Ireland to reducing emissions from those sectors that are not covered by the Emissions Trading Scheme (e.g. transport, agriculture, residential) to 20% below 2005 levels.

4.7.3 Existing Problems

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

4.8 Material Assets¹¹

4.8.1 Water Services

4.8.1.1 Irish Water

Since January 2014 Dún Laoghaire-Rathdown County Council no longer has any direct control in relation to the provision of water or waste water services. The delivery, integration and implementation of strategic water and waste water projects and infrastructural improvements are now the responsibility of **the newly established State body 'Irish Water'**. The Council commit to working closely with Irish Water to ensure that the Plan continues to align with both the National Spatial Strategy and the Regional Planning Guidelines and that the provision of water/waste water services will not be a limiting factor in terms of forecasted growth.

The function and role of Irish Water includes:

- Abstracting and treating water;

¹⁰ EPA (2014) Ireland's Greenhouse Gas Emissions in 2012

¹¹ Much of the text in this section is taken from the Draft Plan

- Delivering water and waste water services to homes and businesses;
- Installing water meters and billing domestic and business customers;
- Raising finance to fund improvements and repairs in the water system; and
- Maintaining and operating the water system.

The upgrading of the infrastructure will contribute towards compliance with the Water Framework Directive, EU Urban Waste Water Treatment Directive and Drinking Water Regulations and will help to protect human health and maintain the quality of coastal waters.

4.8.1.2 Water Services: Recent Achievements and Challenges

Since 2010, significant progress has been made in the delivery of water services infrastructure serving the County including:

- The opening of the Shanganagh waste water treatment works¹² which is key to unlocking much of the, as yet unrealised, development potential of the southern part of the County (and north County Wicklow);
- The opening of the Sandyford High Level Water Supply Scheme; and
- The completion of the Glencullen water supply and improvement scheme.

The overall water supply and waste water situation for the whole Greater Dublin Area (GDA) is critical and is almost certain to become more so in the short term. Water services in the GDA came under severe pressure from the population and economic growth experienced in the region and has been a serious issue of concern since the early 1990s. The speed of change and pace of development experienced previously, in both the wider Dublin Region and within Dún Laoghaire-Rathdown has placed stresses and pressures on the water supply and waste water infrastructure of the County.

¹² The Shanganagh waste water treatment works provides full secondary treatment for waste water from Shanganagh and Bray. The new plant, constructed at the site of an aging waste water treatment works, has the capacity to treat effluent from 186,000 population equivalent (p.e) with the potential to increase capacity to 248,000p.e in the future.

The Old Connaught/Woodbrook Water and Sewerage Schemes - which are absolutely critical to servicing the south of the County (and north Wicklow) - have not been progressed and there are as a consequence still major water and waste water infrastructural shortcomings in the south of the County. The Council continues to work **with Irish Water to address the region's water and waste water infrastructural shortcomings** in the south of the County to ensure the development potential of the major growth cores at Old Conna, Woodbrook, Shanganagh, Rathmichael and Fassaroe (County Wicklow) **are 'unlocked' and realised. The development of these growth centres are fully aligned with, and listed in the Regional Planning Guidelines (RPGs). However, neither the settlement strategy nor the economic strategy as detailed - for these areas -within the RPGs can be delivered without the required water and waste water services infrastructure.**

4.8.1.3 Waste Water Infrastructure

Waste water arising from Dún Laoghaire-Rathdown is generally collected by the waste water collection network and pumped to one of two waste water treatment plants, either: for the south of the County, Shanganagh (where the waste water undergoes secondary treatment); or, for some catchments in the north of the County such as Dodder Valley and UCD, Ringsend (where the waste water undergoes tertiary treatment).

Some areas away from the main settlement areas are unserved, with development using septic tanks. According to the 2011 census, this represents 0.7% of households in the County compared to almost 25% Nationally. **There are 578 'one-off' houses in the County - 'one-off' houses are described as occupied detached houses with individual sewerage systems.** The impact of individual sewerage systems on the environment has consequently not been identified as a major problem. However, maintenance of these systems is important. The Septic Tank Registration and Inspection System will be of benefit in ensuring maintenance and reducing risks posed by malfunctioning systems.

4.8.1.4 Waste Water Infrastructure Capacity, Demand and Performance

The Shanganagh Waste Water Treatment Plant (Reg. No. D0038-01) is the only **treatment plant in the County's administrative**

area. It provides full secondary treatment for waste water from Shanganagh and Bray. The new plant, constructed at the site of an aging waste water treatment works, has the capacity to treat effluent from 186,000 population equivalent (p.e) with the potential to increase capacity to 248,000 p.e by 2022.

The current plant loading is 105,000 p.e. The current population served by the plant is 65,000 p.e from Dún Laoghaire-Rathdown's administrative area and 40,000 p.e from the Bray Town Council administrative area. The plant has enough spare capacity for 81,000 p.e..

Waste water performance information published by the EPA¹³ identified that the Shanganagh waste water treatment plant passed all mandatory Waste Water Treatment Directive related requirements during 2012.

The Dublin City Council operated Ringsend waste water treatment plant provides secondary and tertiary treatment. The current population being served by the Ringsend plant is 1,110,000. The current effluent capacity at Ringsend is 1,640,000 and the current plant loading is 1,760,000 p.e.. This leaves a current shortfall of 120,000 p.e.

The waste water treatment plant in Ringsend failed to meet mandatory Waste Water Treatment Directive related quality standards for phosphorus and nitrogen set in the Directive during 2012. It also failed to meet the optional limits for suspended solids¹⁴.

4.8.1.5 Drinking Water Supply, Capacity and Demand

Over 98% of water distributed in Dún Laoghaire-Rathdown is supplied from Dublin City Council. This water is sourced from catchments outside Dún Laoghaire-Rathdown County Council, primarily Roundwood (Vartry), Ballymore Eustace (Liffey) and Ballyboden (Dodder).

Total daily demand in the Dún Laoghaire-Rathdown County area is approximately 51 mega litres (11 million gallons) per day.

Dún Laoghaire-Rathdown County Council is part of the Greater Dublin Water Supply Area

¹³ EPA (2014) *Focus on Urban Waste Water Treatment in 2012*

¹⁴ EPA (2014) *Focus on Urban Waste Water Treatment in 2012*

which has less than 2% available capacity. Water production capacity in the Dublin region is barely adequate and is currently unable to meet demand in the event of adverse weather cycles or significant system failure. Irish Water plans to invest in strategic capital upgrades and linkages between the existing supply sources and will review options for new supplies over the coming years.

There are three small surface water (river/stream/groundwater) abstraction points in Kiltarnan, Glencullen and Ballyedmonduff serving a population of c. 3,800 p.e. with a total daily demand of approximately 560 m³. Both Kiltarnan and most of the supply area for Ballyedmonduff are connected to the main water distribution network. Glencullen is presently an independent supply but plans are in place to connect to the main distribution network. Therefore, none of the supplies will be independent once this work has been completed.

4.8.1.6 Drinking Water Quality

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

Compliance with the drinking water requirements is determined by comparing the results of analyses submitted by water suppliers to the standard for 48 parameters specified in the European Communities (Drinking Water) Regulations (No. 2), 2007. To ensure that these standards are met, each water supply must be monitored on a regular basis.

Under Section 58 of the Environmental Protection Agency Act 1992 the EPA is required to collect and verify monitoring results for all water supplies in Ireland covered by the European Communities (Drinking Water) Regulations, 2000. The EPA publishes their results in annual reports which are supported by Remedial Action Lists (RALs). The RAL identifies water supplies which are not in compliance with the Regulations mentioned above.

The EPA's 'The Provision and Quality of Drinking Water in Ireland' (EPA, 2012) Reports identify that microbiological compliance levels in Public Water Supplies in Dún Laoghaire-

Rathdown were 100% in both 2011 and 2012. Chemical compliance levels decreased from 100% in 2011 to 99.7% in 2012.

The most recent EPA Remedial Action List (Q3 of 2014) identified three water supplies within the County (Church Road, Roundwood, Stillorgan) in need of improvement with respect to treatment and management issues. The Remedial Action List identifies Interim Measures and an Action Programme for solving these issues.

4.8.2 Waste Management

The total collected and brought household waste in Dún Laoghaire-Rathdown in 2012 amounted to 66,453(t). This is a reduction on 2011 figures where 66,707 (t) was collected and brought.¹⁵

The Government recently adopted a new approach to waste management through a document called 'A Resource Opportunity – Waste Management Policy in Ireland' published in July 2012. This policy provides a roadmap on how Ireland will move away from an over dependence on landfill, by putting in place the most appropriate technologies and approaches to reduce waste, while at the same time maximising the resources that can be recovered from waste.

The policy is predicated on five principles those being prevention and minimisation, reuse, recycling, recovery and disposal.

The Draft Plan commits the Council to continue to work in tandem with EU and National policy and the Environmental Protection Agency in the implementation and execution of its waste management responsibilities and duties throughout the duration of the life time of the Plan.

The 'Dublin Regional Waste Management Plan 2005-2010' is being comprehensively reviewed during 2014. A new Regional Waste Management Plan for the Eastern and Midlands Region is programmed to be published for the first quarter of 2015. Any waste management policies and objectives contained within the new Regional Plan will be reflected within the new County Development Plan 2016-2022.

The County currently has no landfill site or any active waste treatment facilities in its functional area. Hence, the vast bulk of waste that arises in the County is collected locally by private waste companies and transferred to facilities outside the County at Kill and KTK Landfill at Kilcullen, Co. Kildare.

Occasionally a time-limited or volume-limited waste permit is granted to a landowner for the acceptance of waste material suitable for land reclamation purposes. Such waste is classed as inert e.g. soil and/rock and may be sourced within or outside Dún Laoghaire-Rathdown. Additionally home composting of organic waste is also encouraged.

Ballyogan Landfill (EPA Licence no. W0015-01) was decommissioned in 2005. Remediation works at the old Ballyogan landfill site have been completed. The Waste Transfer Facility at the site also ceased operation in 2009. Plans for a regional scale public park at the site exist and it is hoped that a park master plan for the site will be advanced. Since 2010, the site is been used as a major Civic Recycling Facility for the County¹⁶.

4.8.3 Fishing and Marine Resources

The fishing industry in Dún Laoghaire-Rathdown relates not only to commercial fishing (at sea and inland) but also to tourism and recreational activities. The harbours of Dún Laoghaire and Bullock provides fishing year round and are used as recreational and amenity harbours.

The marine resource is very important to Dún Laoghaire-Rathdown as it supports a significant number of water based activities, both work and pleasure related. These include boat hire, yachting, adventure sports, pier/shore angling, sea angling, dolphin and bird watching, hiking, visiting heritage sites and festivals. Dublin Bay Cruises also sail from Dún Laoghaire-Rathdown to Howth daily during the summer months.

4.8.4 Transport

The Vision Statement of the Draft Plan's Sustainable Communities Strategy is "to create sustainable and successful communities through the consolidation of development into

¹⁵ EPA (2014) National Waste Report 2012

¹⁶ Source: Dún Laoghaire-Rathdown County Council

appropriate areas, where residents will be within walking distance of public transport networks and supporting community infrastructure including shops, services, employment, education and leisure facilities”.

In terms of trips to work, school and college, walking travel mode share in Dún Laoghaire-Rathdown is below the Greater Dublin Area (GDA) average, cycling is higher than the GDA average, while overall public transport usage is also above the GDA average. The car, however, remains the dominant mode of transport with 54% of trips being undertaken by this mode (including car passengers).

There is a relatively high quality pedestrian network throughout the County. In recent years, there has been significant investment in pedestrian infrastructure with a particular focus on the larger urban areas such as Dún Laoghaire, Blackrock, Dundrum and Stillorgan. The key issue is to confer a high quality offer, if not a competitive advantage, on pedestrian movements for short trips related to the main towns, key local destinations and transport hubs/ interchanges.

In 2012, a County Cycle Network was developed following a comprehensive evidence-based review that assessed all cycling routes in the County in terms of Quality of Service. Currently over 250km of cycle routes exist in the County with many off-road routes through the major parks. The Cycle Network aims to connect the main attractors (e.g town centres, colleges etc) within the County and to provide effective through-movement for cyclists. It also provides a priority list for the development of a network of Primary Routes (between locations of highest cycling demand) and Secondary Routes (routes through residential estates and parks) to give cyclists route options alternative to cycling along main road traffic corridors.

There is a well-established network of bus routes in the County including a number of significant radial bus corridors. The busiest of these is the N11, where there is a high frequency and high capacity services operating along most of the corridor. There are also frequent services operating on the Rock Road radial corridor. There are, however, a more limited number of east-west orbital services in the County and those that do originate-terminate at Blackrock and Dún Laoghaire Dart Stations. The continued expansion of the Bus Network is of the utmost importance. In

addition, the continuation and improvement of existing bus services along radial and orbital routes, subject to sufficient demand and availability of finance, is also considered a priority.

There are two rail corridors in Dún Laoghaire-Rathdown, the Luas Green Line and the South East rail line (DART). Frequent, high capacity services operate along both these routes. A continuing commitment to the maintenance of frequent, high capacity services operating on both lines is essential.

There are three significant National Road corridors that operate through the County – M50, N11/M11 and N32. The safety, capacity and efficiency of these important corridors will be maintained and protected through development management measures in line with National Roads Authority (NRA) policy and other ongoing improvements to improve the effectiveness of these routes.

4.8.5 Existing Problems

There are a number of challenges with respect to water services which are outlined under Section 4.8.1.2.

The Dublin City Council operated waste water treatment plant in Ringsend failed to meet mandatory Waste Water Treatment Directive related quality standards for phosphorus and nitrogen set in the Directive during 2012. It also failed to meet the optional limits for suspended solids¹⁷.

The most recent EPA Remedial Action List (Q3 of 2014) identified three water supplies within the County (Church Road, Roundwood, Stillorgan) in need of improvement with respect to treatment and management issues. The Remedial Action List identifies Interim Measures and an Action Programme for solving these issues.

The provisions of the new Plan 2016-2022 will contribute towards protection of the environment with regard to impacts arising from material assets.

¹⁷ EPA (2014) *Focus on Urban Waste Water Treatment in 2012*

4.9 Cultural Heritage

4.9.1 Introduction

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

The 'Dún Laoghaire-Rathdown Heritage Plan' 2013- 2018 was adopted by the Council. It contains a number of actions to include communicating the story of the County's heritage, caring for and managing that heritage, and increasing the level of community involvement in heritage.

4.9.2 Archaeological Heritage

4.9.2.1 Introduction

Archaeology is the study of past societies through the material remains left by those societies and the evidence of their environment. Archaeological heritage consists of such material remains (whether in the form of sites and monuments or artefacts in the sense of moveable objects) and environmental evidence. As archaeological heritage can be used to gain knowledge and understanding of the past it is of great cultural and scientific importance.

Archaeological sites and monuments vary greatly in form and date; examples include earthworks of different types and periods, (e.g. early historic ringforts and prehistoric burial mounds), megalithic tombs from the Prehistoric period, medieval buildings, urban archaeological deposits and underwater features.

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

Dún Laoghaire-Rathdown contains various types of archaeological heritage which are protected as monuments.

4.9.2.2 Record of Monuments and Places

Dún Laoghaire-Rathdown's 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.

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 Archaeological Potential in towns and all other monuments of archaeological interest which have so far been identified.

In Dún Laoghaire-Rathdown, there are approximately 400 items on the RMP, with a Zone of Archaeological Potential identified around each monument. There are more entries to the RMP in the rural, south eastern

parts of the Plan area though clusters exist at Dalkey Island and at Dalkey. Clusters also exist west of Loughlinstown and at Glencullen and also at Kilmashogue Mountain in the west of the Plan area.

Figure 4.22 shows the spatial distribution of entries to the RMP in Dún Laoghaire-Rathdown.

Enclosures, Fulacht Fias, Castles, Churches and Grave Yards are amongst the most popular recorded monuments in the Plan area.

Enclosures include areas defined by an enclosing element and occurring in a variety of shapes and sizes, possessing no diagnostic features which would allow classification within another monument category. These may date to any period from prehistory onwards.

A Fulacht Fia is a horseshoe-shaped or kidney-shaped mound consisting of fire-cracked stone and charcoal-enriched soil built up around a sunken trough located near or adjacent to a water supply, such as a stream or spring, or in wet marshy areas. The first recorded use of the Irish term 'fulacht fiadh/fia' (cooking pit of the deer or of the wild) as relating to ancient cooking sites was in the 17th century. These are generally interpreted to have been associated with cooking and date primarily to the Bronze Age (c. 2400-500 BC).

Castles can date from the late 12th to the 16th century AD. Castles in the Plan area include Anglo-Norman masonry castles, hall-houses and tower houses.

Churches are used for public Christian worship. These can be of any date from c. 500 AD onwards.

Grave yards include the burial area around a church. These date from the medieval period (5th-16th centuries) onwards.

4.9.3 Architectural Heritage

4.9.3.1 Introduction

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

archaeological, artistic, cultural, scientific, social, or technical interest.

4.9.3.2 Record of Protected Structures

The Record of Protected Structures (RPS) included in the Development Plan is 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:

- (i) the interior of the structure;
- (ii) the land lying within the curtilage¹⁸ of the structure;
- (iii) any other structures lying within that curtilage and their interiors; and,
- (iv) all fixtures and features which form part of the interior or exterior of any structure or structures referred to in subparagraph (i) or (iii).

There are currently in excess of 2,000 Protected Structures within the County.

These structures include harbours, piers, boat slips, bridges, quarries, Martello Towers, Victorian terraces, Georgian houses, public buildings, street furniture, churches, castles, schools, yacht clubs and a range of domestic architecture.

¹⁸ 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.

Figure 4.23 maps the location of entries to the Record of Protected Structures within the Plan area. These are mainly located along the coastline from Blackrock to Dalkey.

A National Inventory of Architectural Heritage (NIAH) Survey for the Dún Laoghaire-Rathdown area has yet to be published.

4.9.3.3 Architectural Conservation Areas

An Architectural Conservation Area (ACA) is a place, area, group of structures or townscape, which is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or contributes to the appreciation of a Protected Structure. An ACA may or may not include Protected Structures. In an ACA, protection is placed on the external appearance of such areas or structures. Planning permission must be obtained before significant works can be carried out to the exterior of a structure in an ACA, which might alter the character of the structure, or of the ACA.

Dún Laoghaire-Rathdown has 26 designated ACAs which range from groups of artisan and estate workers cottages, planned residential Victorian squares to large areas of residential suburbs and villages. The ACAs include:

- Ballally Cottages
- Castle Cottages
- Dalkey
- Dún Laoghaire Central
- Foxrock
- Haigh Terrace to Park Road
- Killiney
- Monkstown
- Montpelier Place, Temple Hill
- Moss Cottages
- Newtown Villas
- Pembroke Estate Cottages
- Sandycove
- Silchester Road
- Vico Road

The Planning and Development Act, 2000 provides the legislative basis for the protection of such areas, known as Architectural Conservation Areas (ACAs). An ACA is a place, area or group of structures or townscape which is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or value, or contributes to the appreciation of protected structures, whose character it is an objective

to preserve in a development plan. The ACA designation requires that planning permission must be obtained before significant works can be carried out to the exterior of a structure in the ACA which might alter the character of the structure or the ACA.

ACAs enable the protection of the existing character of areas within the settlements listed above throughout the County. This character is a combination of the various layers of development from earliest times to the present. Though often not individually very important, vernacular buildings contribute to the acknowledged distinctive character of **many of the County's** built up areas. Collectively, if properly used and maintained, they can make a significant impact on the retention and enhancement of that character which is important in maintaining local distinctiveness for both inhabitants and visitors.

Ongoing works have taken place to protect and enhance buildings and assets in Council ownership. These include Seapoint Martello Tower, the Killiney Tea Rooms, Stillorgan Obelisk, the wall of the Carrickbrennan Graveyard and Deansgrange Cemetery.

The *Dún Laoghaire-Rathdown Heritage Plan 2013-2019* aims to continue the progress on the programme of Architectural Conservation Areas (ACAs) and also aims to complete the main restoration activity at Marlay and Cabinteely Houses.

Architectural Conservation Areas and Conservation Areas are mapped on Figure 4.24.

4.9.4 Existing Problems

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

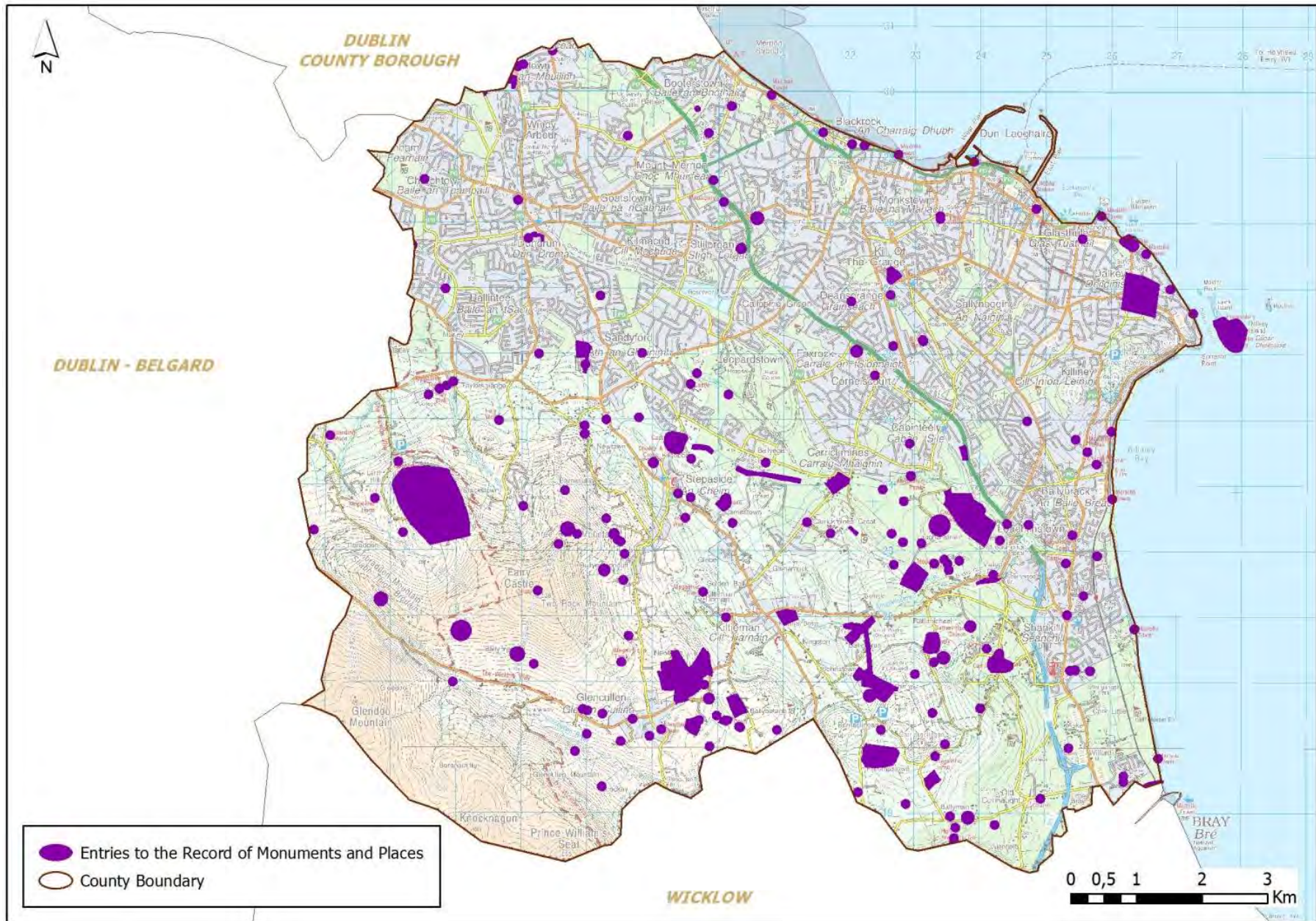


Figure 4.22 Entries to the Record of Monuments and Places

Source: Dún Laoghaire-Rathdown County Council (Unknown)

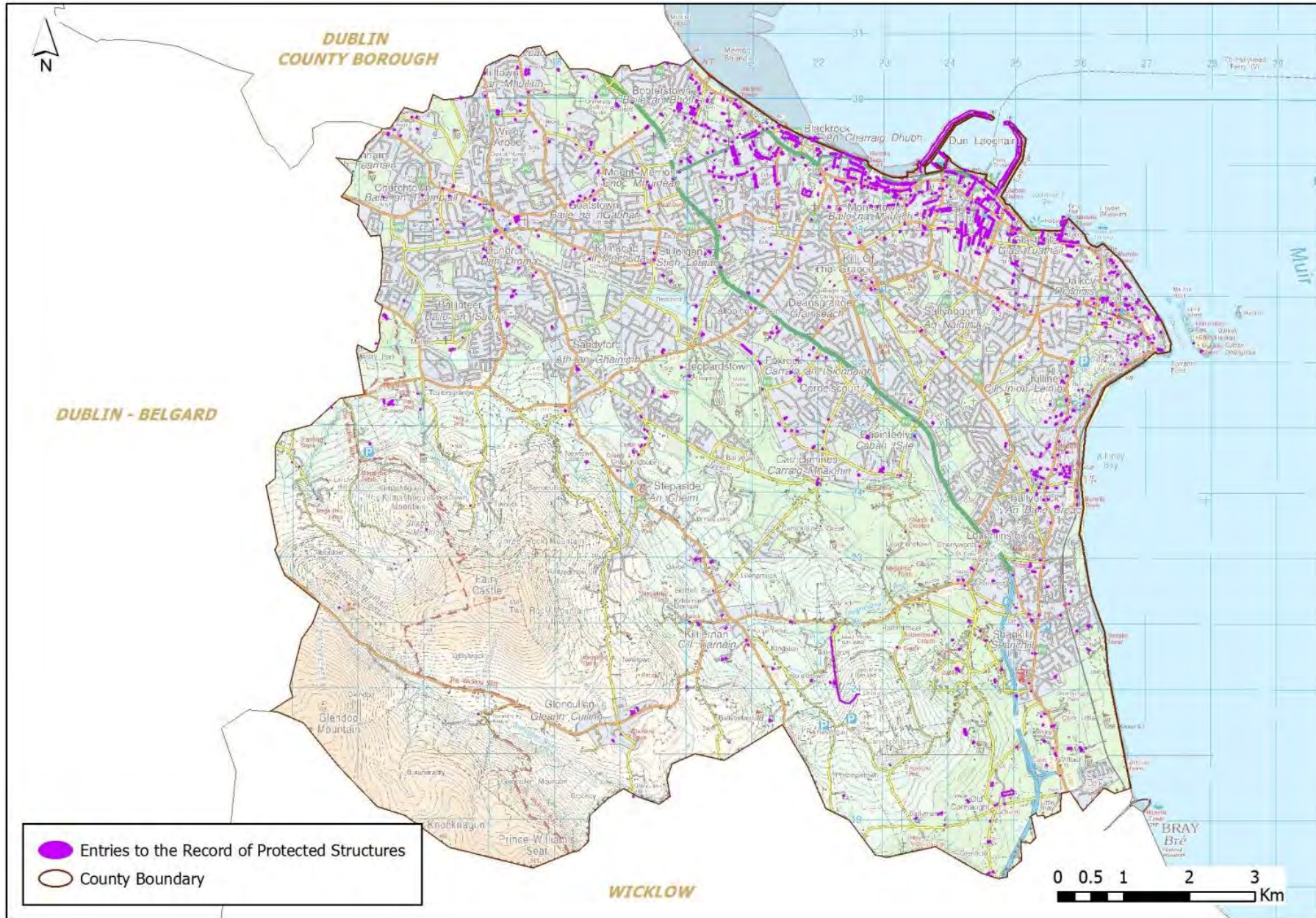


Figure 4.23 Entries to the Record of Protected Structures

Source: Dún Laoghaire-Rathdown County Council (2010)

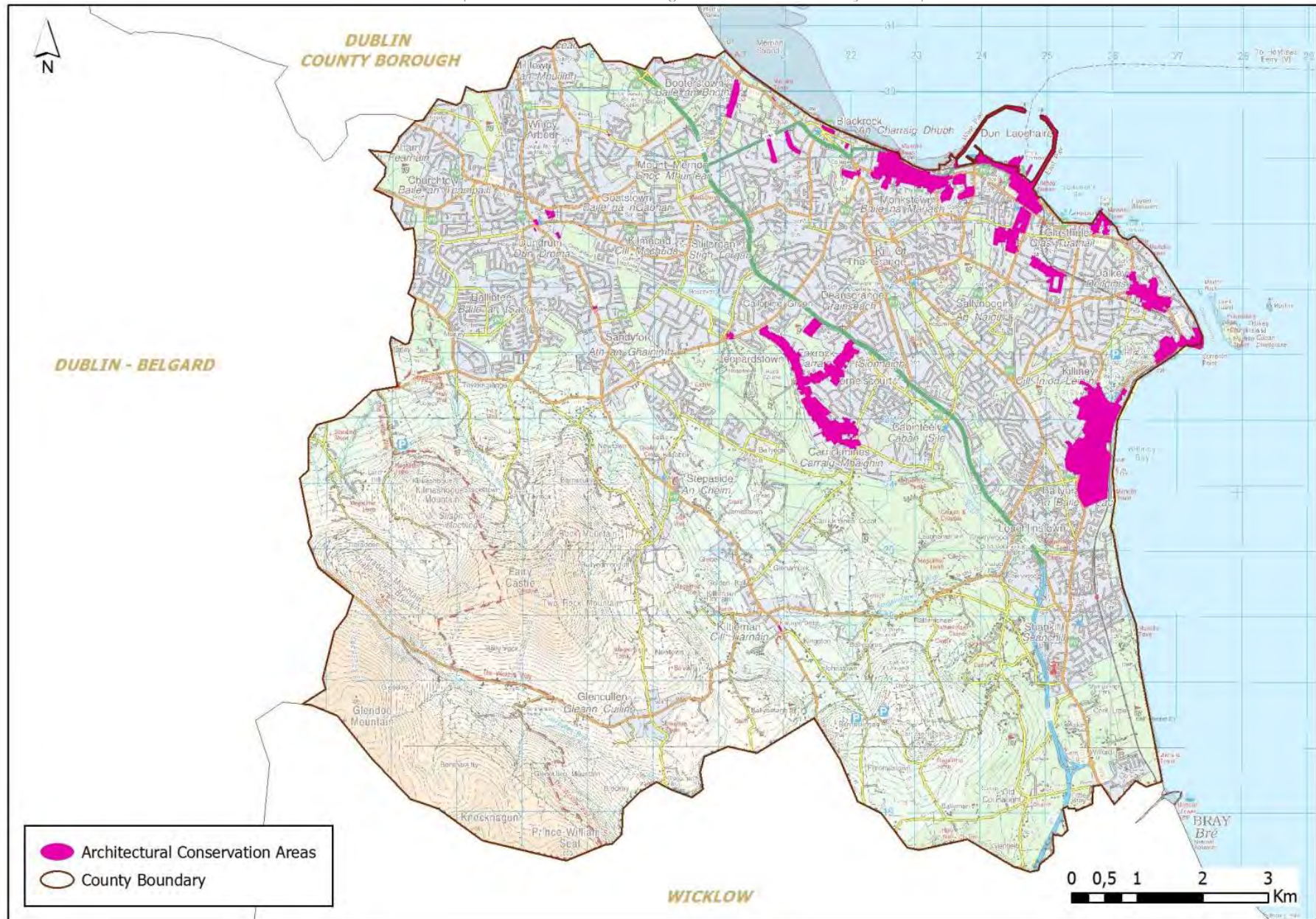


Figure 4.24 Architectural Conservation Areas (ACAs)

Source: Dún Laoghaire-Rathdown County Council (2014)

14. Cherrywood Rathmichael

4.10 Landscape

4.10.1 Introduction

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

4.10.2 Legislation

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.

4.10.3 Landscape Character Assessment and Areas

Landscape Character Assessment attempts to describe landscapes in terms of their character in an objective way. This can be used to inform decision making in relation to the protection of the environment, natural resources and heritage; it can be used to monitor change and can be used to guide development.

In accordance with the **DEHLG's** Landscape and Landscape Assessment Guidelines (2000), Dún Laoghaire-Rathdown County Council have identified 14 Landscape Character Areas which are listed below and mapped on Figure 4.25:

1. Kilmashogue Valley
2. Western Half of Kellystown Road
3. Ticknock Road
4. Marlay Park
5. Kiltiernan Plain
6. Ballycorus
7. Glencullen Valley
8. Glendoo Valley
9. Barnacullia
10. Rathmichael
11. Ballyman
12. Shanganagh
13. Carrickmines

There is a commitment given in the Draft Plan 2016-2022 to review the Landscape Character Areas when new National guidance is issued.

4.10.4 High Amenity Zones

The current County Development Plan and the draft Plan designate High Amenity Zones in the southern portion of the County. These areas consist of landscapes of special value where inappropriate development would contribute to a significant diminution of the landscape setting of the County.

It is the policy of the Council 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 the amenities that affords them their special character.

Areas covered by the High Amenity Zoning include the Glencullen Valley, Glendoo Valley and Kilmashogue Valley.

The areas adjacent to the High Amenity areas are also sensitive landscapes as development in these areas may affect directly or indirectly the quality of the High Amenity areas.

High Amenity Zones are mapped on Figure 4.26.

4.10.5 Historic Landscape Character Areas

An Historic Landscape Character Assessment is a detailed holistic study of the historical development and environmental significance of an area. Such assessments present an overview of the physical, natural, human, and cultural heritage of an area with specific reference to the interaction between the various elements.

Five HLCAs have been carried out in the County to date – Barnacullia, Kiltiernan, Glencullen, Ballycorus - Rathmichael and Old Conna. The assessments cover areas generally on the urban-rural fringe and are thus most likely to come under development pressure during the course of the Plan.

4.10.6 Views and Prospects

The County contains many sites, areas 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 County 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. These Views and Prospects are mapped on Figure 4.27.

A list of Prospects which are included in the Draft Plan are listed below.

1. Dublin City and Bay from Deerpark, Mount Merrion
2. Carrickgollogan from Ballybrack (e.g. Church Road and Churchview Road)
3. Carrickgollogan from Bray Road (Shankill to Bray area)
4. Carrickgollogan from Ballyman Road
5. Carrickgollogan from the Enniskerry Road (south of Kiltiernan Village)
6. The Scalp from Ballyman Road and part of the Enniskerry Road
7. Three Rock Mountain and Two Rock Mountain from the Enniskerry Road (Sandyford -Kiltiernan area) and Sandyford Village
8. Three Rock Mountain and Two Rock Mountain from the Ballybrack Road
9. Three Rock Mountain and Kilmashogue Mountain from Marlay Park
10. Tibbradden Mountain and Kilmashogue Mountain from Kilmashogue Lane
11. Glencullen Mountain and Valley from the Ballybrack Road
12. Glendoo Mountain from the Ballybrack Road
13. Dalkey Hill from Ulverton Road, Station Road and the East Pier
14. Killiney Hill from Vico Road, Station Road and the East Pier

4.10.7 The Coast and the Mountains

The Coast and the Dublin Mountains of Dún Laoghaire-Rathdown are significant features iconic of the County. They are also both used

for a wide variety of purposes - amenity, recreation, commercial, industrial, sporting and military. They represent areas of high landscape quality, natural heritage and amenity value.

It is Council policy to, inter alia: co-operate with the Coastal Zone Management Division of the Department of Agriculture, Food and the Marine in the preparation and implementation of a National Coastal Zone Management Strategy to ensure the conservation, management and protection of man-made and natural resources of the Coastal Zone; and to support the vision and objectives of the Dublin Mountains Strategic Plan for Development of Outdoor Recreation (2007-2017) including the continued development and enhancement of the Dublin Mountains Way.

4.10.8 Landscape Designations in adjacent counties

4.10.8.1 Introduction

Planning applications within the Council's administrative area have the potential to affect landscape designations in the administrative areas of Wicklow, Dublin City and South Dublin.

4.10.8.2 Dublin City

As identified by the Dublin City Development Plan 2011-2017 SEA Environmental Report, Development Plan land-use zonings that primarily relate to landscape protection are Z8 Conservation Areas, Z9 Amenity/Open Space (is a component of **other zonings' permissible uses**) and Z11 waterways (see Figure 4.28). The Little Dargle and Slang Rivers which flow through Dún Laoghaire-Rathdown's area into **Dublin City's area** are shown on this map.

The Dublin City Development Plan 2011-2017 identifies key views and prospects (Figure 4 of the Dublin City Development Plan 2011-2017) but none of these cover areas adjacent to Dún Laoghaire-Rathdown.

4.10.8.3 Wicklow

Wicklow County Council's Landscape Characterisation contained in their 2010-2016 County Plan classifies landscapes in Wicklow according to their sensitivity – their ability to accommodate change or intervention without suffering unacceptable effects to character and values. The most sensitive landscapes are Areas of Outstanding Natural Beauty - which

are of a very high sensitivity - and Areas of Special Amenity - which are of a high sensitivity. Landscapes of lesser sensitivity are Rural and Corridor Areas which are both of medium sensitivity. Urban Areas are considered low sensitivity areas. To immediate the south of Dún Laoghaire-Rathdown the landscape is designated as an Area of Outstanding Natural Beauty, except where it is designated Urban Area at Bray (see Figure 4.30).

The Wicklow County Development Plan also provides for protected views and prospects some of which occur to the immediate south of Dún Laoghaire-Rathdown (see Figure 4.31).

4.10.8.4 South Dublin

The land use zoning contained in the South Dublin County Development Plan 2010-2016 for areas adjacent to Dún Laoghaire-Rathdown (not mapped in this report) comprises two zonings that relate to landscape protection as follow:

- Zoning Objective G *To protect and enhance the outstanding natural character of the Dublin Mountain area* covers areas adjacent to western boundary of Dún Laoghaire-Rathdown around Cruagh and Glendoo Mountains.
- Zoning Objective GB *To provide a green belt between development areas* covers areas adjacent to western boundary of Dún Laoghaire-Rathdown to the south of Edmonstown around Rockbrook.

Other zonings to the north of the M50 do generally not primarily provide for the landscape protection.

4.10.9 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.

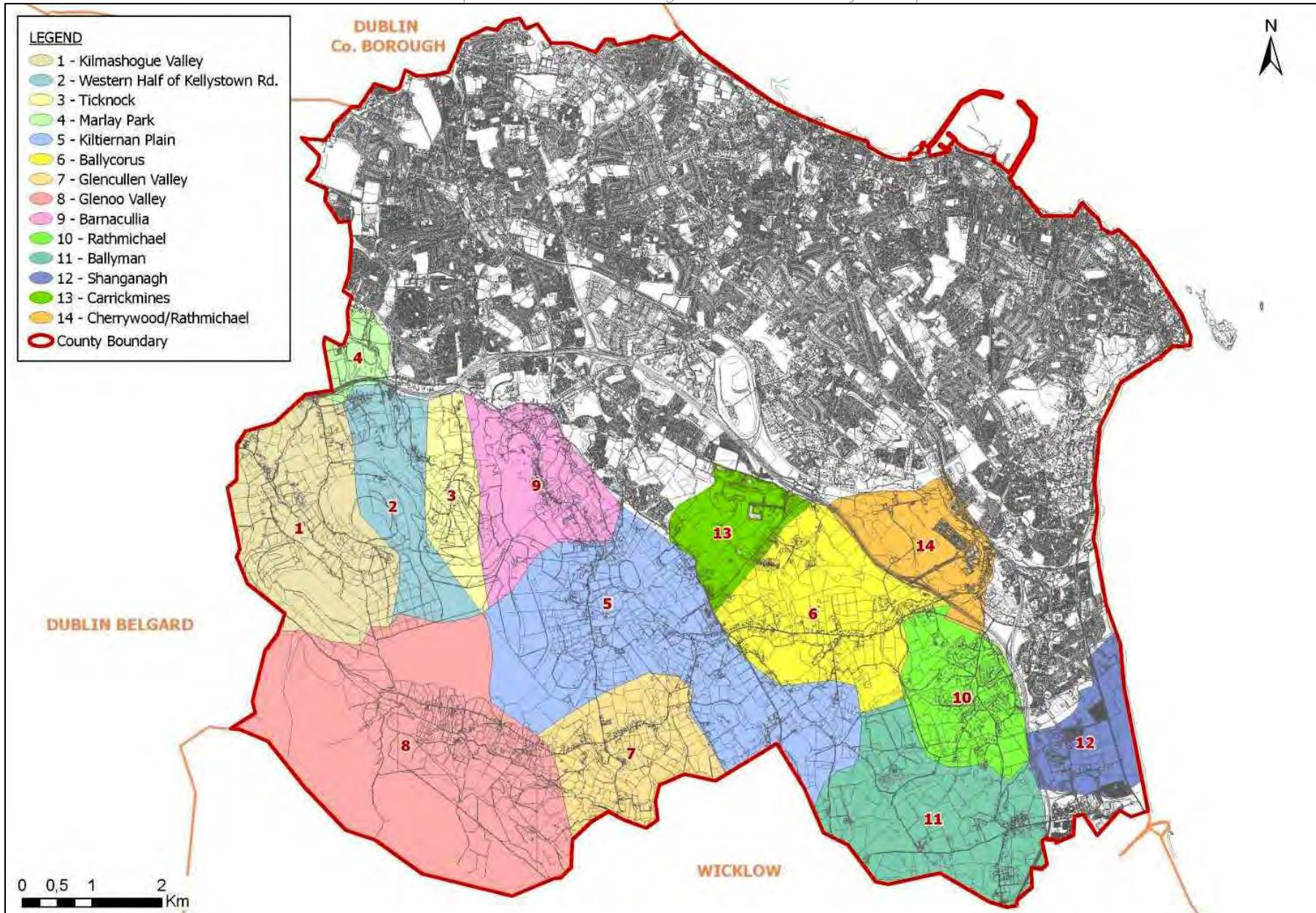


Figure 4.25 Landscape Character Areas

Source: Dún Laoghaire-Rathdown County Council (2010)

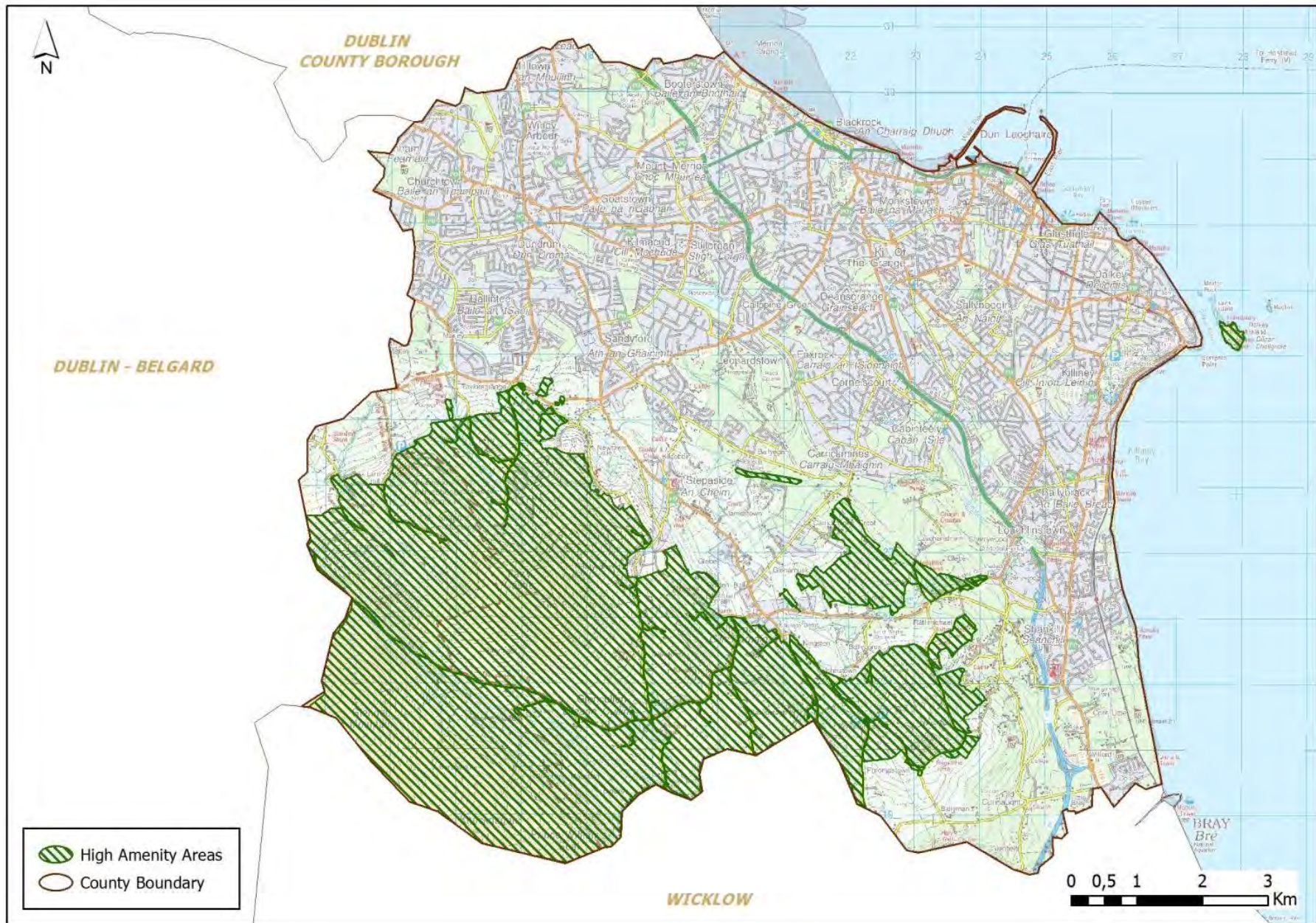


Figure 4.26 High Amenity Area Zoning

Source: Dún Laoghaire-Rathdown County Council (2014)

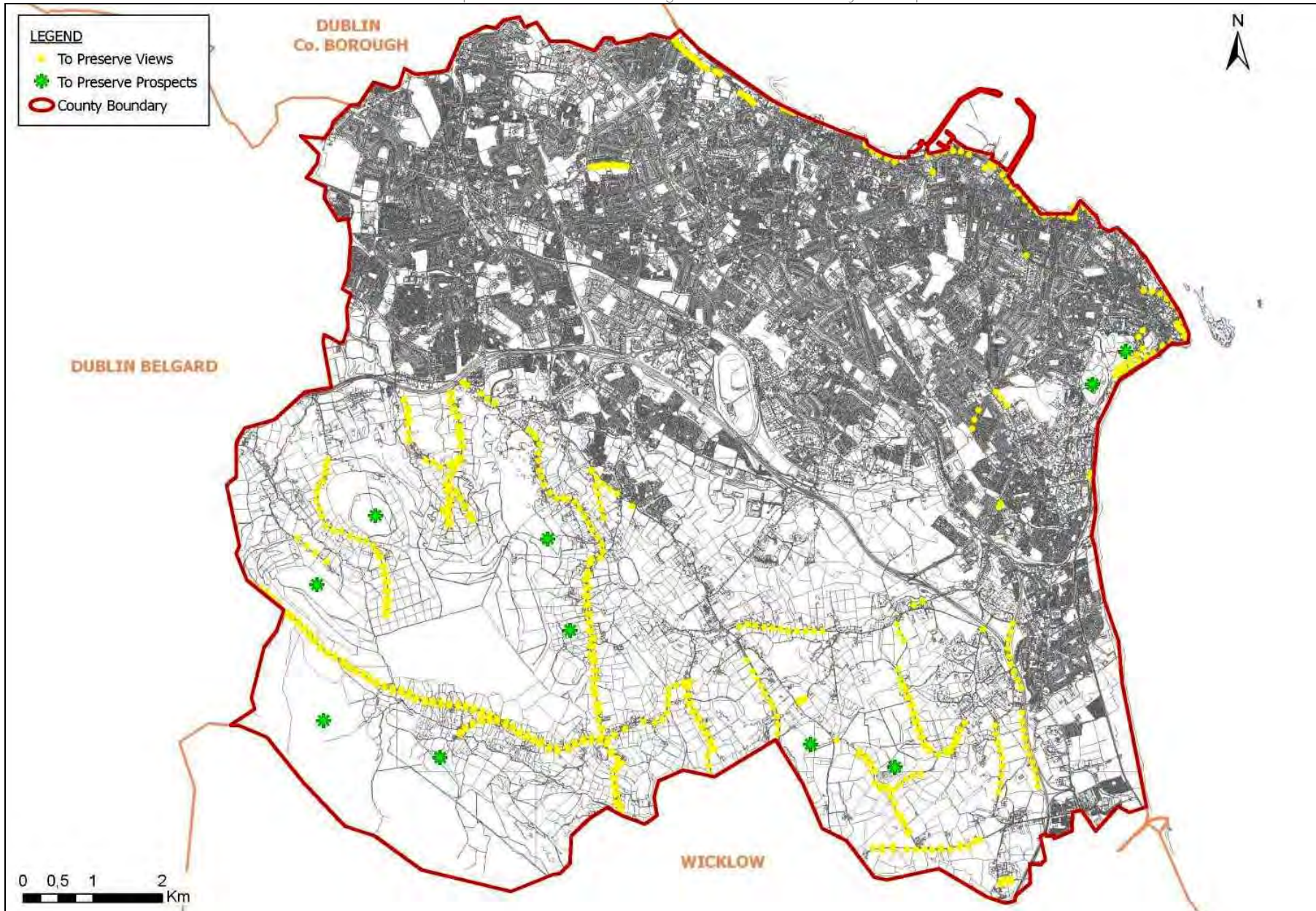


Figure 4.27 Protected Views and Prospects

Source: Dún Laoghaire-Rathdown County Council (2010)

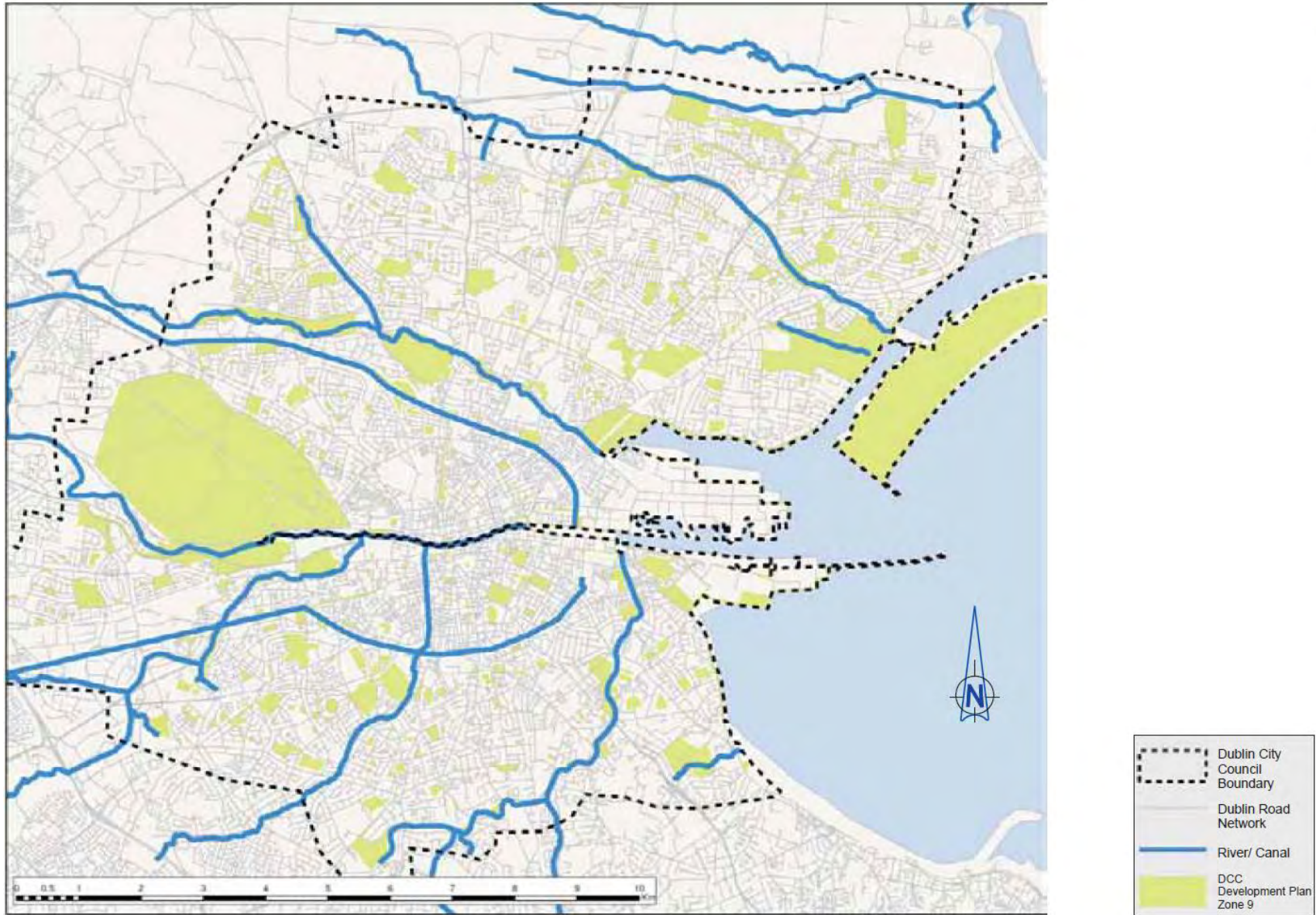


Figure 4.28 Dublin City Council land-use zonings that primarily relate to landscape protection

Source: Dublin City Council (2011)

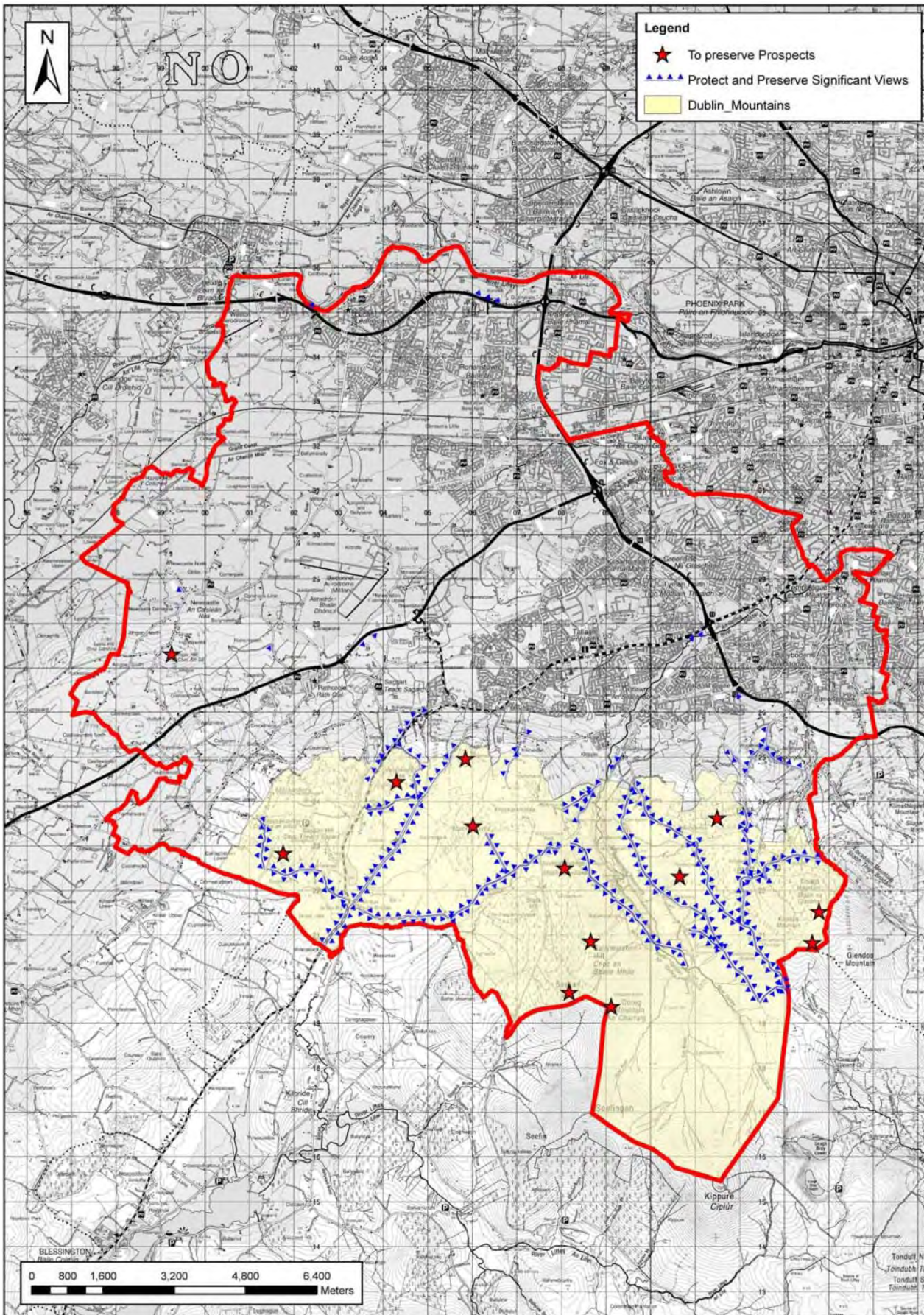


Figure 4.29 South Dublin County Council Protected Views and Prospects

Source: South Dublin County Council (2010)

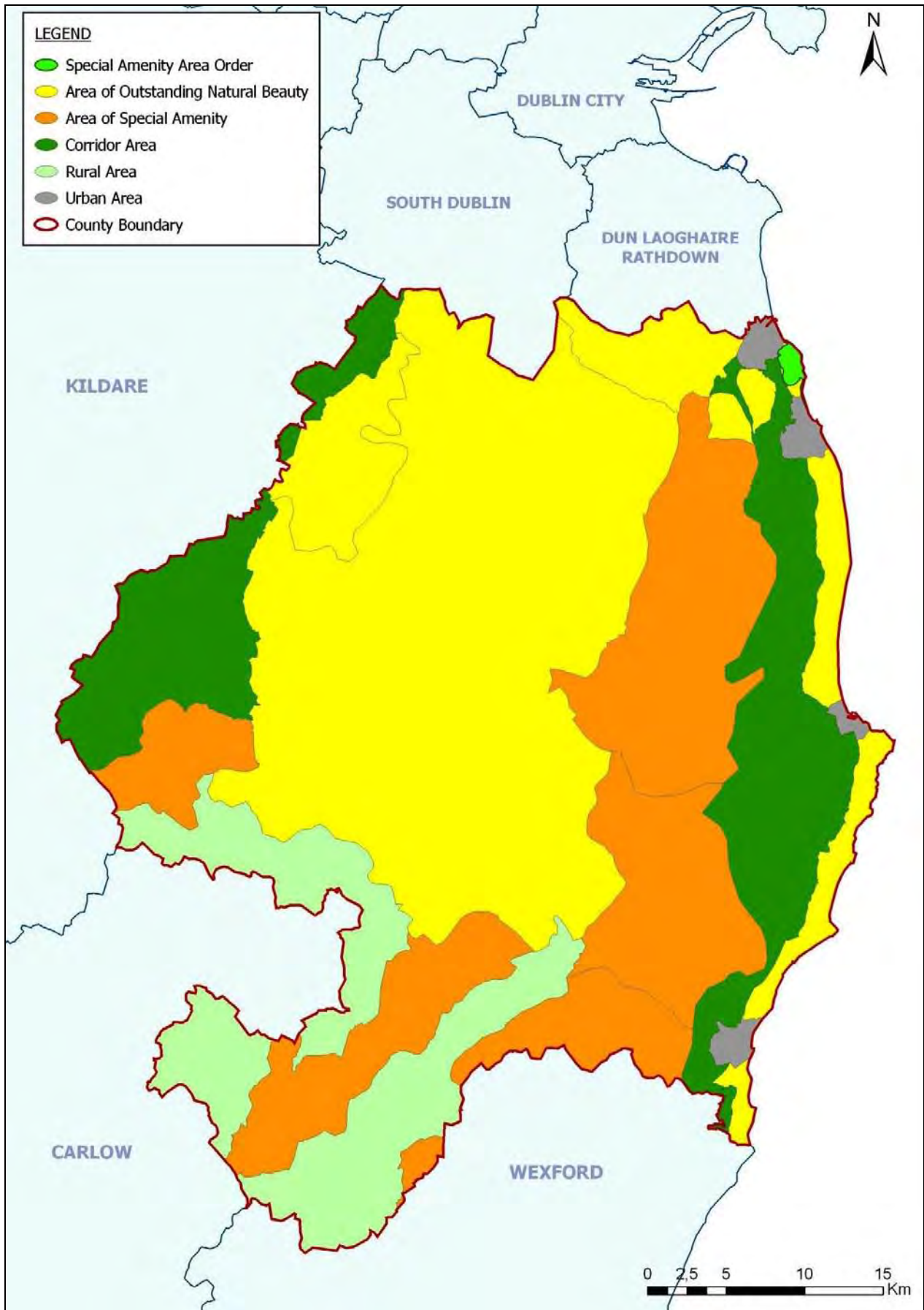


Figure 4.30 Wicklow County Council Landscape Character Areas
Source: Wicklow County Council (2010)

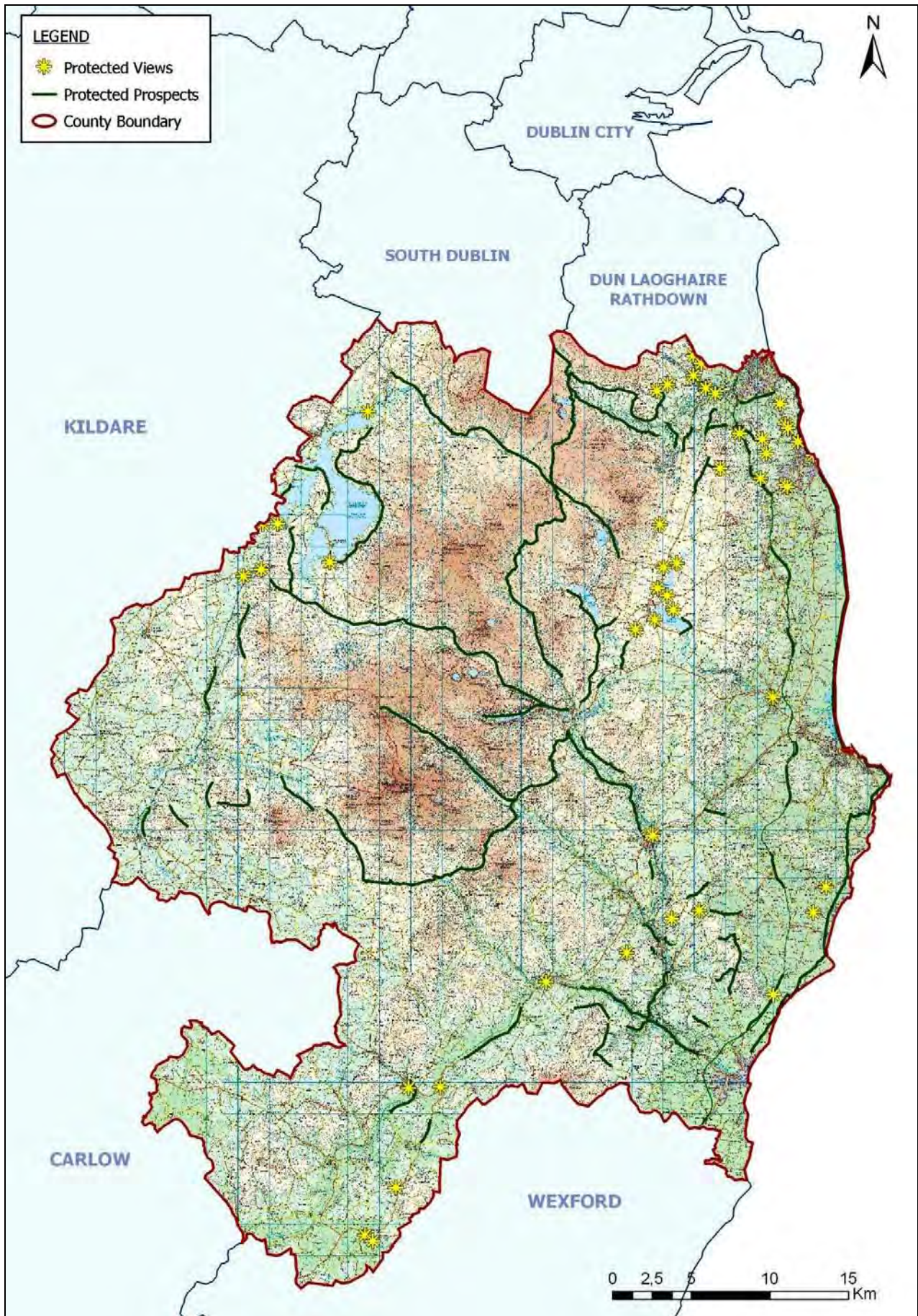


Figure 4.31 Wicklow County Council Protected Views and Prospects

Source: Wicklow County Council (2010)

4.11 Overlay Mapping

4.11.1 Introduction and Methodology

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 4.32 provides an overlay of environmental sensitivities for the County.

It is emphasised that 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 Draft Plan - will need to be complied with in order to ensure that the implementation of the Plan contributes towards environmental protection.

Environmental sensitivities are indicated by colours which range from acute vulnerability (brown) extreme vulnerability (red) to high vulnerability (dark orange) to elevated vulnerability (light orange) to moderate vulnerability (yellow) to low vulnerability (green). Where the mapping shows a concentration of environmental sensitivities there is an increased likelihood that development will conflict with these sensitivities and cause environmental deterioration.

A weighting system applied through Geographical Information System (GIS) software was used in order to calculate the vulnerability of all areas in the County. A slight differentiation is made in certain layers as follows:

- Ecological designations (Special Areas of Conservation, Margaritifera catchments and Salmonid rivers 10 points; proposed Natural Heritage areas 5 points);
- cSAC and SPA waterbodies (10 points);
- Cultural Heritage (entries to the Entries to the Record of Monuments and Places, Architectural Conservation Areas, entries to Records of Protected Structures and entries to the National Inventory of Architectural Heritage 10 points);
- Scenic Routes and View Points 10 points;
- Geological Sites of Importance 10 points;
- Sensitive Landcover categories (broad-leaved forests, peat bogs, natural grassland and water bodies 10 points);

- Entries to the Register of Protected Areas for drinking water (both surface and ground water bodies) 10 points;
- Flood extents 10 points; and
- Aquifers which are highly (5 points) or extremely (10 points) vulnerable to pollution;
- Surface with poor (10 points) ecological status.

The scale of sensitivity for each area of the County corresponds to the sensitivity factors: 5 points corresponds to one sensitivity factor; 10 points corresponds to two sensitivity factors; 20 points corresponds to four sensitivity factors and so on. The scores for each area are added together in order to determine overall vulnerability as is shown on Table 4.4.

Score	Vulnerability Class
5-15	Low
20-25	Moderate
30-35	Elevated
40-45	High
50-60	Extreme
>60	Acute

Table 4.4 Overall Vulnerability Classes

4.11.2 Conclusions

As previously referenced, the occurrence of multiple sensitivities in any location does not preclude development; rather it flags at a strategic level that the mitigation measures - which have already been integrated into the Draft Plan as policies and objectives - 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 most of the County is of a low to moderate sensitivity. The level of environmental sensitivity increases towards the south west of the County due to ecological designations (including cSAC, pNHA and Freshwater Pearl Mussel catchments), water sensitivities (extremely and highly vulnerable aquifers), sensitive landcover (peat bogs) and landscape designations (scenic routes and viewpoints). A small number of areas were classified as being of Extreme to Acute Vulnerability (sensitivities include hydrological, ecological, landscape and flood risk).

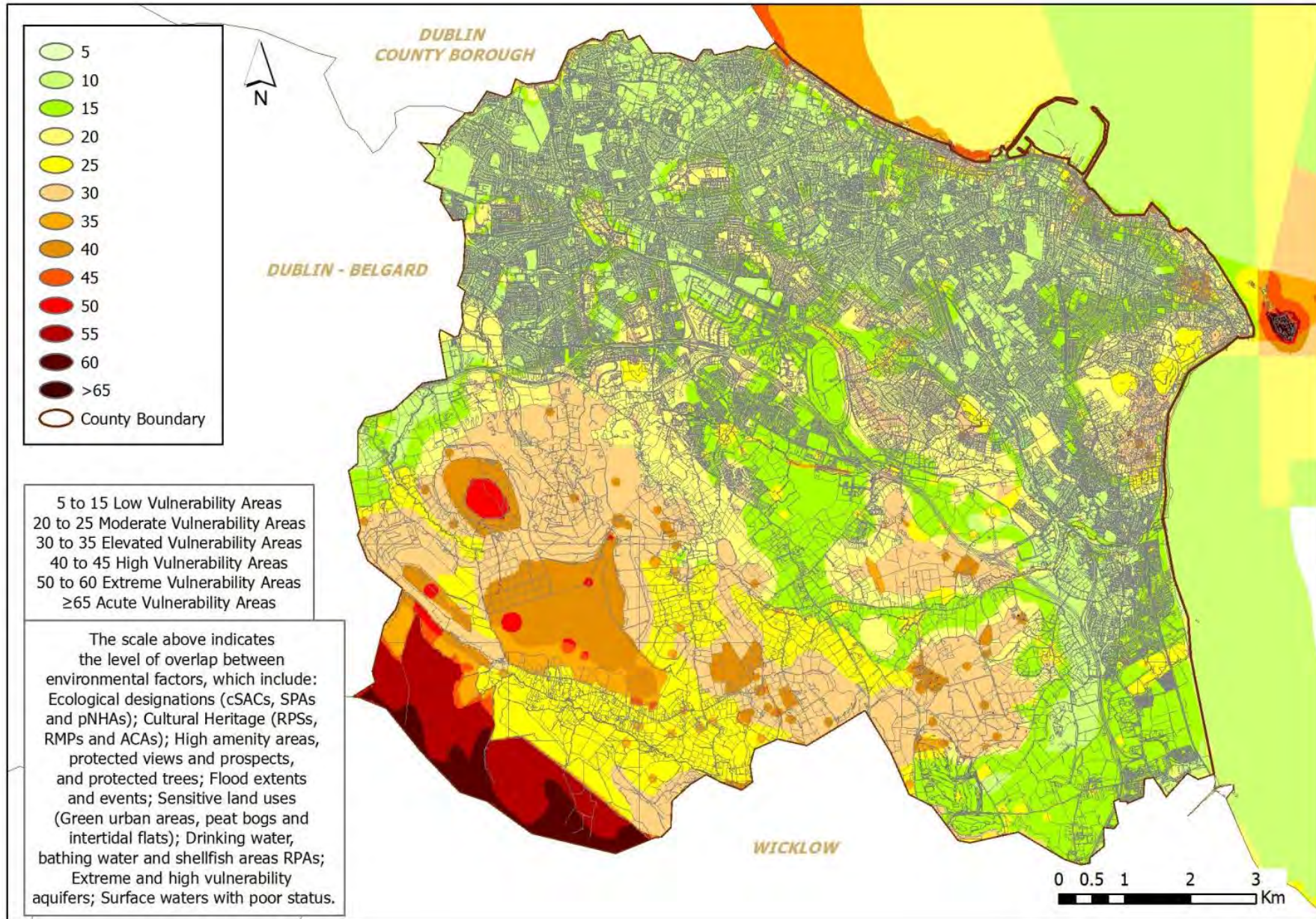


Figure 4.32 Overlay Mapping of Environmental Sensitivities

Sources: Various, as detailed under previous figures

Section 5 Strategic Environmental Objectives

5.1 Introduction

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

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

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

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

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

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

5.2 Biodiversity, Flora and Fauna

5.2.1 Habitats Directive 1992

The European Council Directive on the Conservation of natural habitats and of wild fauna and flora (92/43/EEC), referred to as the Habitats Directive, aims to ensure the conservation of certain natural habitats and

species which are at favourable conservation status.

Special Areas of Conservation (SACs) are designated and protected under the Habitats Directive 1992 (92/43/EEC) due to their conservation value for habitats and species of importance in the European Union.

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

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

Article 10 of the Habitats Directive recognises the importance of ecological networks as corridors and stepping stones for wildlife, including for migration, dispersal and genetic exchange of species of flora and fauna. The Directive requires that ecological connectivity and areas of ecological value outside the network of designated ecological sites are maintained, and it recognises the need for the management of these areas through land use planning and development policies.

In Ireland, the habitats and species occurring in both SACs and SPAs are protected from effects of development occurring outside their boundaries under Section 18 "Prohibition of works on lands outside a European site" of the European Communities (Natural Habitats) Regulations 1997. The Regulations require that where a development is proposed to be carried out, on any land that is not within a protected site and is liable to have an adverse impact on the protected site in question, including direct, cumulative and indirect impacts, an Appropriate Assessment is required.

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

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

5.2.2 Birds Directive 1979

The 1979 European Council Directive on the Conservation of Wild Birds (79/409/EEC), referred to as the Birds Directive, - as well as its amending acts - seeks to protect, manage and regulate all bird species naturally living in the wild within the European territory of the Member States, including the eggs of these birds, their nests and their habitats; and to regulate the exploitation of these species.

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

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

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

5.2.3 European Communities (Birds and Natural Habitats) Regulations 2011

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

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

5.2.4 UN Convention on Biological Diversity 1992

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

5.2.5 National Biodiversity Plan 2011

The preparation and implementation of Ireland's 2nd National Biodiversity Plan 2011¹⁹ 'Actions for Biodiversity 2011 – 2016' complies with an obligation under the UN Convention on Biological Diversity. The Plan has been developed in line with the EU and International Biodiversity strategies and policies.

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

5.2.6 Wildlife Act 1976 and Wildlife (Amendment) Act 2000

The basic designation for wildlife is the Natural Heritage Area (NHA). They cover nationally important semi-natural and natural habitats, landforms or geomorphological features, wildlife plant and animal species or a diversity of these natural attributes. Under the Wildlife Amendment Act (2000), NHAs are legally protected from damage from the date they are formally proposed for designation. Proposed NHAs (pNHAs) were published on a non-

¹⁹ Department of Arts, Heritage, Gaeltacht and the Islands (2002) *National Biodiversity Plan* Dublin: Government of Ireland

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

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

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

5.2.7 County Biodiversity Plan

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

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

5.2.8 (Draft) National Peatlands Strategy

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

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

5.2.9 SEOs, Indicators and Targets

SEO B1:	To ensure compliance with the Habitats and Birds Directives with regard to the protection of Natura 2000 Sites and Annexed habitats and species ²⁰
Indicator B1:	Conservation status of habitats and species as assessed under Article 17 of the Habitats Directive
Target B1:	Maintenance of favourable conservation status for all habitats and species protected under National and International legislation to be unaffected by implementation of the Plan ²¹

²⁰ 'Annexed habitats and species' refer to those listed under Annex I, II & IV of the EU Habitats Directive and Annex I of the EU Birds Directive.

²¹ Except as provided for in Section 6(4) of the Habitats Directive, viz. There must be:

- (a) no alternative solution available;
- (b) imperative reasons of overriding public interest for the plan to proceed; and
- (c) adequate compensatory measures in place.

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

SEO B3:	To avoid significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites ²² and to ensure compliance with the Wildlife Acts 1976-2010 with regard to the protection of listed species
Indicator B3i:	Number of significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites resulting from development provided for by the Plan
Target B3i:	Avoid significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites resulting from development provided for by the Plan
Indicator B3ii:	Number of significant impacts on the protection of listed species
Target B3ii:	No significant impacts on the protection of listed species

5.3 Population and Human Health

5.3.1 Population

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

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

²² The Planning and Development Act 2000 as amended defines a 'wildlife site'. See Section 5.2.7.

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

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

5.3.2 Human Health

5.3.2.1 Overview

The impact of implementing the Draft Plan on human health is determined by the impacts which the Plan will have upon environmental vectors. Environmental vectors are environmental components, such as air, water or soil, through which contaminants or pollutants, which have the potential to cause harm, can be transported so that they come into contact with human beings. Impacts would be influenced by the extent to which new development is accompanied by appropriate infrastructure - this relates to SEOs M1 and M2; Impacts upon the quality of water bodies - these relate to SEOs W1 and W2; and the extent of development provided which would affect flood risk - this relates to SEO W3.

5.3.2.2 Emission Limits

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

5.3.3 SEO, Indicator and Target

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

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

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

5.4 Soil

5.4.1 Overview

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

Given the importance of soil and the need to prevent further soil degradation, the Sixth Environment Action Programme²³ called for the development of a Thematic Strategy on Soil Protection.

²³ Decision No 1600/2002/EC of the European Parliament and of the Council of 22nd July 2002 laying down the Sixth Community Environment Action Programme (OJ L 242, 10.9.2002, p. 1).

5.4.2 SEO, Indicator and Target

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

5.5 Water

5.5.1 The Water Framework Directive 2000

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

5.5.2 Quality Standards for Surface Waters

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

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

- The establishment of legally binding quality objectives for all surface

waters and environmental quality standards for pollutants;

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

In order to satisfy the overall WFD objective of 'good status', a surface water body must achieve the requirements of the good ecological²⁴ and chemical²⁵ status.

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

5.5.3 Quality Standards and Threshold Values for Ground Water

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

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

²⁴ Ecological status comprises: biological quality elements, physiochemical conditions and hydromorphological quality elements. The overall ecological status of the water body is determined by the lowest level of status achieved across all quality elements.

²⁵ Chemical status assessment is based on compliance with the standards laid down for priority substances by Directive 2008/105/EC on environmental quality standards in the field of water policy (the Surface Waters Regulations give effect to the environmental standards established by this Directive).

as ensuring a continuity to the 1980 Groundwater Directive (Directive 80/68/EEC on the protection of groundwater against pollution caused by dangerous substances) which is due to be repealed under the WFD by the end of 2013.

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

Groundwater quality standards are environmental quality standards expressed as the concentration of a particular pollutant, group of pollutants or indicator of pollution in groundwater, which should not be exceeded in order to protect human health and the environment. Annex I of the Directive sets standards for two pollutants: Nitrates - 50mg/l - and; Active substances in pesticides²⁶, including their relevant metabolites, degradation and reaction products - 0,1 µg/l and 0,5 µg/l (total²⁷).

Irish groundwater threshold values²⁸ are currently in the process of being set by the EPA.

5.5.4 Eastern River Basin Management Plan

Dún Laoghaire-Rathdown is located within the Eastern River Basin District for which a River Basin Management Plan and a Programme of

²⁶ 'Pesticides' means plant protection products and biocidal products as defined in Article 2 of Directive 91/414/EEC and in Article 2 of Directive 98/8/EC, respectively.

²⁷ 'Total' means the sum of all individual pesticides detected and quantified in the monitoring procedure, including their relevant metabolites, degradation and reaction products.

²⁸ Threshold values are to be established by Member States for all pollutants and indicators of pollution which characterise groundwater bodies classified as being at risk of failing to achieve good groundwater chemical status under the WFD. Threshold values are required to be established in a way that, should the monitoring results at a representative monitoring point exceed the thresholds, this will indicate a risk that one or more of the conditions for good groundwater chemical status - with regard to the ability of groundwater to support human uses and with regard to waters used for the abstraction of drinking water - are not being met.

Measures are being implemented in order to enable the achievement of the requirements of the WFD.

5.5.5 Bathing Water

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

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

5.5.6 Flooding

5.5.6.1 EU Floods Directive

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

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

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

5.5.6.2 DEHLG/OPW Flood Risk Management Guidelines

In November 2009 the DEHLG/OPW issued *The Planning System and Flood Risk Management Guidelines for Planning Authorities*. These are aimed at ensuring a more consistent, rigorous and systematic approach which will fully incorporate flood risk assessment and management into the planning system.

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

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

5.5.6.1 Strategic Flood Risk Assessment

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

5.5.7 SEOs, Indicators and Targets

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

SEO W1:	To maintain and improve, where possible, the quality and status of surface waters
Indicator W1i:	Classification of Overall Status (comprised of ecological and chemical status) under the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (SI No. 272 of 2009)
Target W1i:	Not to cause deterioration in the status of any surface water or affect the ability of any surface water to achieve 'good status' ²⁹ by 2015
Indicator W1ii:	Mandatory and Guide values as set by the EU Bathing Water Directive and transposing Bathing Water Quality Regulations (SI No. 79 of 2008)
Target W1ii:	To achieve - as a minimum - Mandatory values and, where possible, to achieve Guide values as set by the EU Bathing Water Directive and transposing Bathing Water Quality Regulations (SI No. 79 of 2008)

²⁹ Good status as defined by the WFD equates to approximately the following in the current national schemes of classification as set out by the EPA:

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

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

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

5.6 Material Assets

5.6.1 Water Services Act 2007

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

5.6.2 Water Services Act 2013

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

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

5.6.3 Urban Waste Water Treatment Directive 2001

The treatment of waste water is governed by the Urban Waste Water Treatment Directive (91/271/EEC) (amended by Directive 98/15/EEC) transposed into Irish law by the Urban Waste Water Treatment Regulations 2001 (SI No. 254 of 2001). The Directive aims to protect the environment from the adverse effects of the waste water discharges by

ensuring that waste water is appropriately treated before it is discharged to the environment. The Regulations stipulate that sewage treatment facilities are in place in all towns by 2005.

Appropriate treatment is essential in order to meet the requirements of the Water Framework Directive (see Section 5.5.1).

5.6.4 Drinking Water Regulations 2007

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

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

5.6.5 Waste Management

The Council's Waste Management Strategy is firmly grounded in EU and National policy and can be summarised by the waste hierarchy of prevention, recycling, energy recovery and disposal. In relation to the treatment of waste, Dún Laoghaire-Rathdown County Council is committed to developing a waste management model which conforms to the European Union and National Waste Management Hierarchy. The 'Dublin Regional Waste Management Plan 2005-2010' - is to be comprehensively reviewed in 2014. A new Regional Waste Management Plan for the Eastern and Midlands Region is programmed to be published for the first quarter of 2015. Any waste management policies and objectives contained within the new Regional Plan may require to be reflected within the new County Development Plan 2016-2022 - depending on the chronologies of the two separate documents.

5.6.6 SEOs, Indicators and Target

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

SEO M2:	To serve new development with adequate drinking water that is both wholesome and clean
Indicator M2:	Number of non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health as a result of implementing the Plan
Target M2:	No non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health as a result of implementing the Plan

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

5.7 Air and Climatic Factors

5.7.1 Introduction

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

Travel is a source of:

1. Noise;
2. Air emissions; and
3. Energy use (38.8% of Total Final Consumption in Ireland in 2010 was taken up by transport, the largest take up of any sector)³⁰.

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

³⁰ Sustainable Energy Ireland (2011) *Energy in Ireland 1990 – 2010*

5.7.2 Air Quality

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

The principles to this European approach are set out under the Air Quality Framework Directive 1996 while four daughter Directives lay down limits or thresholds for specific pollutants.

5.7.3 Climatic Factors

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

5.7.4 Noise

Noise is unwanted sound. Traffic noise alone is harming today the health of almost one third of Europeans³¹.

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

- Draw up *strategic noise maps* for major roads, railways, airports and agglomerations, using harmonised noise indicators³² and use these maps to assess the number of people which may be impacted upon as a result of excessive noise levels;

³¹ World Health Organization Regional Office for Europe (2003) *Technical meeting on exposure-response relationships of noise on health 19-21 September 2002* Bonn, Germany Bonn: WHO

³² [L_{den} (day-evening-night equivalent level) and L_{night} (night equivalent level)]

- Draw up action plans to reduce noise where necessary and maintain environmental noise quality where it is good; and
- Inform and consult the public about noise exposure, its effects, and the measures considered to address noise.

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

5.7.5 SEOs, Indicators and Targets

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

5.8 Cultural Heritage

5.8.1 Archaeological Heritage

5.8.1.1 Valletta Convention 1992

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

5.8.1.2 National Heritage Plan for Ireland 2002

The core objective of the National Heritage Plan for Ireland 2002³³ is to protect Ireland's

³³ Department of Arts, Heritage, Gaeltacht and the Islands (2002) *National Heritage Plan for Ireland* Dublin: Government of Ireland

heritage. In this regard the polluter pays and the precautionary principle are operable.

5.8.1.3 National Monuments Acts

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

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

Any works at, or in relation to a recorded monument requires two **months' notice** to the Department of the Environment, Heritage and Local Government under section 12 of the National Monuments (Amendment) Act, 1994.

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

5.8.2 Architectural Heritage

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

Architectural Conservation Areas (ACAs) are places, areas or groups of structures or townscapes which are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or value, or contribute to the appreciation of protected structures, whose character it is an objective to preserve in a development plan. The ACA designation requires that planning permission must be obtained before significant works can be carried out to the exterior of a structure in the ACA which might alter the character of the structure or the ACA.

5.8.3 SEO, Indicators and Targets

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

SEO CH2:	To protect architectural heritage including entries to the Record of Protected Structures and Architectural Conservation Areas and their context
Indicator CH2:	Percentage of entries to the Record of Protected Structures and Architectural Conservation Areas and their context protected from significant adverse effects arising from new development granted permission under the Plan
Target CH2:	Protect entries to the Record of Protected Structures and Architectural Conservation Areas and their context from significant adverse effects arising from new development granted permission under the Plan

5.9 Landscape

5.9.1 Planning and Development Acts

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

5.9.2 European Landscape Convention

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

5.9.3 (Draft) National Landscape Strategy

In July 2014 the Department of Arts, Heritage and Gaeltacht **published ‘A Draft National Landscape Strategy for Ireland 2014 – 2024’ which sets out Ireland’s aims and objectives with regard to landscape.** The Draft Strategy contains a commitment to preparing an overarching National Landscape Character Assessment that will be followed by the **publication of ‘Planning Guidelines on Local Landscape Character Assessment’.**

5.9.4 County Designations

There are a variety of County level designations which are afforded degrees of protection under the existing 2010-2016 and Draft Plan 2016-2022 including High Amenity Zones and Views and Prospects (see Section 4.10).

5.9.5 SEO, Indicator and Target

SEO L1:	To minimise significant adverse visual impacts within and adjacent to the Plan area - especially having regard to the Plan Policies LHB1 to 5 which provide for the protection and management of Landscape Character Areas, the Seascape, High Amenity Zones, Historic Landscape Character Areas and Views and Prospects
Indicator L1:	Implementation of Plan Policies LHB1 to LHB5 which provide for the protection and management of Landscape Character Areas, the Seascape, High Amenity Zones, Historic Landscape Character Areas and Views and Prospects
Target L1:	To implement Plan Policies LHB1 to LHB5 which provide for the protection and management of Landscape Character Areas, the Seascape, High Amenity Zones, Historic Landscape Character Areas and Views and Prospects

Section 6 Description of Alternatives

6.1 Introduction

As per the requirements of the SEA Directive, this SEA considers reasonable alternatives for the County Development Plan taking into account the objectives and the geographical scope of the Plan.

This section identifies and describes three different alternatives.

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

6.2 Rational

The following summarises a series of 'Scenarios' which describe alternative visions of how the future development of Dún Laoghaire-Rathdown could occur. These scenarios were identified early in the Plan-preparation/SEA process and developed further with various iterations passing to and from the Planning and SEA teams.

The RPGs provide for a further allocation from 2016-2022 of c. 19,850 units. This equates to a housing target of c. 3,300 residential units per annum over the six year period to 2022. Each alternative accounts for the required provision of housing and, to varying extents, for the delivery of services such as drainage and water supply. They also take account of relevant non-residential requirements, including retail cores and employment as well as recreation and, to varying extents, green corridors and sustainable mobility.

The alternatives seek to respond to the relevant National/Regional planning strategies including the National Spatial Strategy, the Regional Planning Guidelines (RPGs) and the RPGs Retail Strategy for the Greater Dublin Area 2008-2016 and follow on from a number of strategies carried out within the County including the Housing Strategy and Land Availability studies.

Dún Laoghaire-Rathdown sustains an important network of green corridors that is of ecological importance and is also attractive to people for lifestyle choices and recreation. This network of green infrastructure has a range of environmental sensitivities that require careful consideration on a strategic level.

The alternatives provide the basis for the comparative evaluation of the likely environmental effects of each plan, which in turn serves the purpose of identifying which features of plans and policies are likely to be sensitive or robust over the widest range of circumstances. For the purpose of this assessment no particular alternative is preferred over the other, indeed the chosen strategy combines elements from each alternative considered.

6.3 Alternative Descriptions

6.3.1 Scenario A

Restructuring the Current Housing Pattern

Scenario A includes some 'densification' by restructuring the utilisation of current housing stock as well as the provision of new higher density units on extensive and smaller 'pocket' greenfield sites. This aims to make the current housing stock use land and services more efficiently by increasing the occupancy of units. The approach seeks to influence and manage population densities in existing units through incentives to increase household occupancy in the County therefore reducing the need for housing growth. According to the 2011 census, 23% of the current housing stock is occupied by one inhabitant; often these units have the capacity to facilitate a greater number of inhabitants. The Housing Agency forecast that by 2018 in the Dublin Region that 57% of all households are likely to be for one and two person households.

Scenario A would facilitate opportunities to rehouse the population within the planned higher density areas of the County [such as Cherrywood] as well as by using incentives e.g. such as encouraging small apartment

buildings within or near mature residential enclaves, or more suitable types of 'empty-nester' developments, thus freeing up other existing underutilised housing stock with the capacity for higher population density. The policy would aim to achieve one quarter of new housing through incentives to facilitate densification of existing areas combined with achieving the remainder in greenfield areas such as Cherrywood.

The scenario would focus on urban hubs within the County and along existing or planned public transport corridors. Priorities would be placed on protecting the residential amenity and character of established residential areas by providing opportunities to rehouse the current population in the same community. This would ensure a sustainable mix of population and employment and increase the critical mass of activity required to sustain an integrated public transport network for the County. The method also facilitates a more sustainable approach to the current housing pattern by using the existing housing stock and associated existing social and physical services more efficiently.

6.3.2 Scenario B

Demographic Alternative - Phased Zoning

Scenario B seeks to focus development on demographic growth within the County over the lifetime of the Plan. Using this approach, additional lands would be prioritised and zoned on a phased basis over the lifetime of the Development Plan using demographic alternatives based on high, medium and low growth. The development would also take into account factors including demand, economic growth and availability of funding and priorities for infrastructure and service provision.

There is an emerging pattern where the population are increasingly choosing to live within the M50 in areas like Dún Laoghaire-Rathdown that have a high amenity and recreational value. However, the development of additional lands increases the risk to amenities and environmental sensitivities. By employing the method of phased zoning, Dún Laoghaire-Rathdown County Council will be able to incrementally facilitate different levels of demographic growth while ensuring the protection of environmental sensitivities -

including green corridors and areas of high amenity and recreational value.

The scenario would ensure that areas currently zoned and serviced by foul water and water supply schemes are prioritised and developed/redeveloped initially - including Cherrywood which is designated as a 'Strategic Development Zone' and smaller sites throughout the County that are presently available and serviced with infrastructure, followed by zoned areas south of the County that are waiting for funding to be made available for provision of foul drainage or water supply.

By selecting zones on a phased basis for development/redevelopment to accommodate growth as it occurs, this scenario allows for a greater degree of coordination of development through a plan-led approach in sync with the relevant planning strategies. This scenario needs to be viewed as requiring alternative scenarios of phasing/sequencing to take account of the reality that implementation will be determined by the priorities and budgets of external factors such as Irish Water.

6.3.3 Scenario C

Market-Led Growth

Alternative Scenario C facilitates an evaluation of the consequences of allowing the location and nature of development to respond to likely market demand or land availability with applications being evaluated on a case by case basis – especially where developments are proposed on green belt/sports areas or rural areas.

For evaluation purposes, it assumes that the areas proposed for development would occur on lands at the edge of currently developed areas – which have poor public transport links, and little or no current infrastructure capacity – such a water supply or foul drainage.

A pattern of opportunistic, but potential non-conforming, applications – of this type – are an historically persistent feature of development during periods of economic recovery or expansion and, as such, constitute a realistic alternative that needs to be assessed. This is particularly relevant during a period of rapidly changing demand – such as is currently emerging – where developments for specialist residential accommodation –

such as units for single persons, student **housing and housing for 'down-sizing, empty-nesters' may give rise to un-**met needs that have not been adequately anticipated by current housing policies.

This scenario needs to be given equal evaluation to determine whether – notwithstanding potential non-conformity with national and regional planning policies – it could produce options that are environmentally advantageous.

Section 7 Evaluation of Alternative Scenarios

7.1 Introduction

This section provides a comparative evaluation of the environmental effects of implementing the three alternative scenarios. This determination sought to understand whether each alternative was likely to improve, conflict with or have a neutral interaction with the receiving environment.

7.2 Methodology

The description of the environmental baseline together with the maps provided in Section 4 of this report (including the Environmental Sensitivity Overlay Mapping) is used in the evaluation.

Strategic Environmental Objectives (SEOs) identified in Section 5 and reproduced overleaf are also used. Succinct planning pros and cons are also provided alongside the environmental effects for each scenario.

The provisions of the alternatives are evaluated using compatibility criteria (see Table 8.1 below) in order to determine how they would be likely to affect the status of the SEOs. The SEOs and the alternatives are arrayed against each other to identify which interactions - if any - would cause effects on specific components of the environment. Where the appraisal identifies a likely conflict with the status of an SEO the relevant SEO code is entered into the conflict column - e.g. B1 which stands for the SEO likely to be affected - **in this instance** to ensure compliance with the Habitats and Birds Directives with regard to the protection of Natura 2000 Sites and Annexed habitats and species³⁴.

The interactions identified are reflective of likely significant environmental effects³⁵:

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 environmental component to which the SEO relates.
2. Interactions that would probably conflict with the status of an SEO and would be unlikely to be mitigated would be likely to result in a significant negative effect on the environmental component to which the SEO relates.
3. Interactions that would potentially conflict with the status of an SEO and would be likely to be mitigated would be likely to result in potential significant negative effects however these effects could be mitigated (for the chosen alternative these effects will be mitigated by measures which have been integrated into the Draft Plan).

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.

³⁴ 'Annexed habitats and species' refer to those listed under Annex I, II & IV of the EU Habitats Directive and Annex I of the EU Birds Directive.

³⁵ These effects include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects.

Table 7.1 Strategic Environmental Objectives³⁸

SEO Code	SEO
B1	To ensure compliance with the Habitats and Birds Directives with regard to the protection of Natura 2000 Sites and Annexed habitats and species ³⁶
B2	To ensure compliance with Article 10 of the Habitats Directive with regard to the management of features of the landscape which - by virtue of their linear and continuous structure or their function act as stepping stones (designated or not) - are of major importance for wild fauna and flora and essential for the migration, dispersal and genetic exchange of wild species
B3	To avoid significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites ³⁷ and to ensure compliance with the Wildlife Acts 1976-2010 with regard to the protection of listed species
PHH1	To protect populations and human health from exposure to incompatible landuses
S1	To avoid damage to the hydrogeological and ecological function of the soil resource
W1	To maintain and improve, where possible, the quality and status of surface waters
W2	To prevent pollution and contamination of ground water
W3	To comply as appropriate with the provisions of the Planning System and Flood Risk Management: Guidelines for Planning Authorities (DEHLG, 2009)
M1	To serve new development with adequate and appropriate waste water treatment
M2	To serve new development with adequate drinking water that is both wholesome and clean
M3	To reduce waste volumes, minimise waste to landfill and increase recycling and reuse
C1	To reduce travel related emissions to air and to encourage modal change from car to more sustainable forms of transport
CH1	To protect archaeological heritage including entries to the Record of Monuments and Places and/or their context
CH2	To protect architectural heritage including entries to the Record of Protected Structures and Architectural Conservation Areas and their context
L1	To minimise significant adverse visual impacts within and adjacent to the Plan area - especially having regard to the Plan Policies LHB1 to 5 which provide for the protection and management of Landscape Character Areas, the Seascape, High Amenity Zones, Historic Landscape Character Areas and Views and Prospects

Table 7.2 Criteria for appraising the effect of Alternatives on SEOs

Likely to Improve status of SEOs	Probable Conflict with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated
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³⁶ 'Annexed habitats and species' refer to those listed under Annex I, II & IV of the EU Habitats Directive and Annex I of the EU Birds Directive.

³⁷ The Planning and Development Act 2000 as amended defines a 'wildlife site'. See Section 5.2.7.

³⁸ See Section 5.1 for a description of Strategic Environmental Objectives.

7.3 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 2 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 the sensitivity mapping contained in Section 4 indicates an elevated level of vulnerability, future development could conflict with these cumulative environmental sensitivities and lead to a deterioration in environmental integrity. The interrelationships between environmental components that help determine these potential effects are identified on Table 8.4 in Section 8 e.g. interrelationships between: human health and water quality; human health and air quality; human health and flood risk; and ecology and water quality; and,
- Potential *inter-Plan* cumulative effects - these arise when the effects of the implementation of one plan occur in combination with those of other plans, programmes, developments, etc.

Effects that may arise as a result of implementing the Plan have been mitigated to the extent that the only residual adverse effects likely to occur as a result of implementation of the Plan are those which are identified under Section 8.6.

With regard to potential *inter-Plan* cumulative environmental effects, these occur as a result of the combination of: potential environmental effects which are identified by the assessment; and the effects arising from other legislation, plans, programmes or developments arising. Other legislation, plans, programmes or developments arising which have been considered by the assessment of environmental effects include those which are detailed under Sections 2.5, 4 and 5.

The SEA undertaken for the Plan has taken account of the Council's obligation to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

In considering the relationship with legislation and other plans and programmes it is important to note that the Plan will be implemented within areas that have existing plans and programmes for a range of sectors [e.g. water management, land use, energy] at a range of levels [e.g. National, River Basin District, Regional, County and Local] that are already subject to more specific higher and lower tier SEA and AA.

The assessment of the likely *inter-Plan* cumulative environmental effects requires knowledge of the likely effects of all plans/developments under consideration. The assessment is limited in this instance as there has been limited assessment of the likely types of developments provided for by other policies, plans and programmes that could occur in combination with the implementation of the County Development Plan.

Taking into account available information, cumulative effects to be considered include those resulting from the Draft Plan and: other Development Plans (e.g. Carlow, Dún Laoghaire-Rathdown, Kildare, South Dublin and Wexford County Development Plans); and sectoral plans (e.g. Eastern and South Eastern River Basin Management Plans 2009-2015, Grid25 and associated Implementation Programme, Irish Water's Proposed Capital Investment Plan 2014-2016). Such effects include:

- Potential cumulative effects upon the use of water and wastewater treatment capacity arising from new developments;
- Potential cumulative effects upon surface and ground water quality;
- Potential cumulative effects arising from linear developments including in coastal areas;

- Potential cumulative effects on flood risk by, for example, development of greenfield lands or obstruction of flood paths adjacent to the Dún Laoghaire-Rathdown County border;
- Potential cumulative effects on habitat networks arising from fragmentation occurring on both sides of the County border;

A variety of the issues covered by the Draft Plan provisions are Regional issues which are considered: at Regional Assembly level, in the Regional Planning Guidelines for the Greater Dublin Area 2010-2022 and by Planning Authorities across the Region. The solutions to these issues are often Regional solutions which are subject to their own consenting procedures. Works arising outside of the Draft Plan as a result of providing for new development within the Plan area including those arising as a result of the cumulative provision of development in the wider Dublin Region would potentially conflict with a number of environmental components, across the wider Dublin Region and beyond, including: ecology, soil function, the status of water bodies and the landscape. Some of these conflicts would be mitigated by measures integrated into the Draft Plan while some would be mitigated by measures arising out of separate consent procedures.

The SEA for the Regional Planning guidelines for the Greater Dublin Area 2010 – 2022 makes particular reference to the potential cumulative effects in association with other relevant plans and programmes within the Greater Dublin Area including: the proposed 2030 Vision for Greater Dublin Transport; the Dodder and the Fingal East Meath Flood Risk Assessment and Management Studies; the Water Supply Project; and the relevant River Basin Management Plans.

7.4 Potentially Significant Adverse Effects

There are a number of potentially significant adverse environmental effects which are common to all alternatives and these are described in Table 7.3 below. For the Draft Plan, these effects will be mitigated by measures which have been integrated into the Draft Plan.

Table 7.3 Potentially Significant Adverse Environmental Effects common to all alternatives

Environmental Component	Potential Effect
Biodiversity and Flora and Fauna	<ul style="list-style-type: none"> ○ Loss of biodiversity with regard to Natura 2000 Sites and Annexed habitats and species (see baseline Section 4.3) ○ Loss of biodiversity with regard to ecological connectivity and stepping stones (see baseline Section 4.3) ○ Loss of biodiversity with regard to designated sites including Wildlife Sites and listed species (see baseline Section 4.3)
Population and Human Health	<ul style="list-style-type: none"> ○ Spatially concentrated deterioration in human health (see baseline Section 4.4)
Soil	<ul style="list-style-type: none"> ○ Damage to the hydrogeological and ecological function of the soil resource (see baseline Section 4.5)
Water	<ul style="list-style-type: none"> ○ Adverse impacts upon the status and quality of water bodies, including bathing waters (see baseline Section 4.6) ○ Increase in the risk of flooding (see baseline Section 4.6)
Material Assets	<ul style="list-style-type: none"> ○ Failure to provide adequate and appropriate waste water treatment (see baseline Section 4.8.1; water services infrastructure and capacity would be needed to ensure the mitigation of potential conflicts) ○ Failure to comply with drinking water regulations and serve new development with adequate drinking water that is both wholesome and clean (see baseline Section 4.8.1; water services infrastructure and capacity would be needed to ensure the mitigation of potential conflicts) ○ Increases in waste levels (see baseline Section 4.8.2)
Air and Climatic Factors	<ul style="list-style-type: none"> ○ Failure to contribute towards sustainable transport and associated impacts (see baseline Section 4.7)
Cultural Heritage	<ul style="list-style-type: none"> ○ Effects on entries to the Record of Monuments and Places and other archaeological heritage (see baseline Section 4.9.2) ○ Effects on entries to the Records of Protected Structures and other architectural heritage (see baseline Section 4.9.3)
Landscape	<ul style="list-style-type: none"> ○ Occurrence of adverse visual impacts (see baseline Section 4.10)

7.5 Scenario A - Restructuring the Current Housing Pattern³⁹

7.5.1 Environmental Effects

Likely to Improve Status of SEOs

By planning higher density areas, providing incentives to facilitate densification of existing areas and providing development along existing or planned public transport corridors, Scenario A would:

- Avoid the need for unnecessary greenfield development in certain locations thereby contributing towards the protection of many environmental components [biodiversity and flora and fauna, soil, water (including interactions with population and human health), landscape designations, cultural heritage outside of developed areas]⁴⁰.

By planning higher density areas, providing incentives to facilitate densification of existing areas, focusing upon urban hubs, providing development along existing or planned public transport corridors and providing a sustainable mix of population and employment, Scenario A would:

- Help to maximise the uptake in smarter, more sustainable modes of transport and minimise transport related emissions (including indirect benefits with regard to the protection of human health)⁴¹.

By providing incentives to facilitate densification of existing areas, Scenario A would:

- Enable development to be served by existing water services and drainage infrastructure, subject to capacity being provided (including indirect benefits with regard to the protection of water, biodiversity and flora and fauna, soil and human health)⁴².

Potential Conflict with status of SEOs

By providing for infill within existing developed areas, this scenario would potentially result in a localised intensification of effects. There would be potential for adverse effects to occur with regard to the protection of cultural heritage (both archaeological and architectural) and its context and the protection of biodiversity and flora and fauna in urban areas⁴³. Flood risk could increase in certain areas due to the cumulative loss of flood water storage areas in certain locations⁴⁴.

The potential adverse effects detailed under Table 7.3⁴⁵ would be present during the implementation of this scenario however it would be possible to mitigate them and residual adverse effects would be likely to be non-significant.

With regard to the effects described under Table 7.3, there would be higher potential for in combination/cumulative effects in urban areas, in particular, arising from potential interactions with land use plans for Dublin City, South Dublin and Wicklow.

³⁹ Footnotes like this are used in this section in order to identify instances where interactions between the relevant scenario and the relevant SEOs occur. The nature of these interactions is identified on Table 7.4.

⁴⁰ **SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 CH1 CH2 L1**

⁴¹ **SEOs C1 PHH1**

⁴² **SEOs M1 M2 W1 W2 W3 B1 B2 B3 S1 PHH1**

⁴³ **SEOs CH1 CH2 B1 B2 B3**

⁴⁴ **SEOs W3 HH1**

⁴⁵ **SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1**

7.5.2 Planning Effects

Pros

- Good use of installed infrastructure and amenity
- Reduces pressure on land

Cons

- Requires innovative techniques

7.6 Scenario B - Demographic Alternative - Phased Zoning

7.6.1 Environmental Effects

Likely to Improve Status of SEOs

Phasing would help to ensure that infrastructure, services, facilities and amenities are provided together with residential and employment development.

By providing for phasing, Scenario B would:

- Delay the piecemeal replacement of non-artificial surfaces with artificial surfaces in areas which are not prioritised for development thereby delaying potential effects and contributing towards the protection of many environmental components [biodiversity and flora and fauna, soil, water (including interactions with population and human health), landscape designations, cultural heritage outside of developed areas]⁴⁶.
- Help to maximise the uptake in smarter, more sustainable modes of transport and minimise transport related emissions (including indirect benefits with regard to the protection of human health)⁴⁷ by concentrating in development in specific, considered locations already served by public transport.
- Enable development to be served by existing water services and drainage infrastructure, subject to capacity being provided (including indirect benefits with regard to the protection of water, biodiversity and flora and fauna, soil and human health)⁴⁸. Areas that are currently zoned and serviced by foul water and water supply schemes would be prioritised and developed/redeveloped initially, followed by zoned areas south of the County that are waiting for funding to be made available for provision of foul drainage or water supply.

Potential Conflict with status of SEOs

The phasing of zoning provided for by the Plan would facilitate the development of the Plan area and therefore would potentially conflict with a number of environmental components. The nature of these potential conflicts is provided on Table 7.3⁴⁹ - it would be possible to mitigate the conflicts and residual adverse effects would be likely to be non-significant.

It should be noted that due to the geographical location of lands to be developed there would be least potential for in combination effects with land use plans for Dublin City and South Dublin under this scenario. Note that there would be higher potential for in combination effects with land use plans for Wicklow given that allowing for phased development would result in considerable development on lands in the South of the County bordering with Wicklow.

⁴⁶ **SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 CH1 CH2 L1**

⁴⁷ **SEOs C1 PHH1**

⁴⁸ **SEOs M1 M2 W1 W2 W3 B1 B2 B3 S1 PHH1**

⁴⁹ **SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1**

With regard to the effects described under Table 7.3, there would be particular potential for in combination/cumulative effects arising from potential interactions with land use plans for Wicklow/Bray.

7.6.2 Planning Effects

Pros

- Pragmatic
- Responsive to market and demographic needs
- Matches development with infrastructure

Cons

- Lacks certainty at plan-making due to the fact that the provision of strategic infrastructure is outside the control of the Local Authority
- Challenges of timely infrastructure provision
- **Confusing 'signals' to market** potentially leading to frustration

7.7 Scenario C - Market-Led Growth

7.7.1 Environmental Effects

Likely to Improve Status of SEOs

Under this scenario, infilling of existing developed areas would be significantly less likely to occur. Consequently, in urban areas, there would be potential for beneficial effects to occur with regard to the protection of cultural heritage (both archaeological and architectural) and its context, the protection of biodiversity and flora and fauna⁵⁰ and the protection of flood water storage areas in urban areas⁵¹.

Potential Conflict with status of SEOs

Because the areas proposed for development would occur on lands at the edge of currently developed areas - which have poor public transport links, have little or no current infrastructure capacity, such a water supply or foul drainage, and have low levels of development or are previously undeveloped – the potential adverse effects which are detailed under Table 7.3⁵² would be present. It would be difficult to mitigate against all of these potential adverse effects and it is likely that implementation of a Plan which evolves from this scenario would result in significant residual adverse effects (including loss of habitats, landscape effects, surface and potentially ground water effects, effects on cultural heritage and unsustainable patterns of mobility).

With regard to the effects described under Table 7.3, there would be higher potential for in combination/cumulative effects in more rural areas, in particular, arising from potential interactions with land use plans for South Dublin and Wicklow.

7.7.2 Planning Effects

Pros

- Could help to match to social and economic needs
- Allows flexibility

Cons

- Unsustainable
- Potentially non-conforming with planning policies

⁵⁰ **SEOs CH1 CH2 B1 B2 B3**

⁵¹ **SEOs W3 HH1**

⁵² **SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1**

7.8 Comparative Evaluation against SEOs

Table 7.4 provides a comparative evaluation of alternative scenarios against the SEOs.

Table 7.4 Evaluation of Alternative Scenarios against SEOs

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated
Scenario A: Restructuring the Current Housing Pattern	<p>By planning higher density areas, providing incentives to facilitate densification of existing areas and providing development along existing or planned public transport corridors, Scenario A would:</p> <ul style="list-style-type: none"> • Avoid the need for unnecessary greenfield development in certain locations thereby contributing towards the protection of many environmental components SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 CH1 CH2 L1 • Help to maximise the uptake in smarter, more sustainable modes of transport and minimise transport related emissions. SEOs C1 PHH1 • Enable development to be served by existing water services and drainage infrastructure, subject to capacity being provided. SEOs M1 M2 W1 W2 W3 B1 B2 B3 S1 PHH1 		<p>By providing for infill within existing developed areas, this scenario would potentially result in a localised intensification of effects upon the protection of cultural heritage, protection of biodiversity and flood risk (cumulative loss of storage) in urban areas. SEOs CH1 CH2 B1 B2 B3 W3</p> <p>Potential adverse environmental effects arising would be present during the implementation of this scenario however it would be possible to mitigate them and residual adverse effects would be likely to be non-significant. SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>
Scenario B: Demographic Alternative - Phased Zoning	<p>By providing for phasing, Scenario B would:</p> <ul style="list-style-type: none"> • Delay the piecemeal replacement of non-artificial surfaces with artificial surfaces in areas which are not prioritised for development thereby delaying potential effects and contributing towards the protection of many environmental components SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 CH1 CH2 L1 • Help to maximise the uptake in smarter, more sustainable modes of transport and minimise transport related emissions by concentrating in development in specific, considered locations already served by public transport SEOs C1 PHH1 • Enable development to be served by existing water services and drainage infrastructure, subject to capacity being provided SEOs M1 M2 W1 W2 W3 B1 B2 B3 S1 PHH1 		<p>The phasing of zoning provided for by the Plan would facilitate the development of the Plan area and therefore would potentially conflict with a number of environmental components. It would be possible to mitigate potential adverse effects arising and residual adverse effects would be likely to be non-significant. SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>
Scenario C: Market-Led Growth	<p>Under this scenario, infilling of existing developed areas would be significantly less likely to occur. Consequently, in urban areas, there would be potential for beneficial effects to occur with regard to the protection of cultural heritage, biodiversity and flood risk in urban areas. SEOs CH1 CH2 B1 B2 B3 W3</p>	<p>Because the areas proposed for development would occur on lands at the edge of currently developed areas - which have poor public transport links, have little or no current infrastructure capacity, such a water supply or foul drainage, and have low levels of development or are previously undeveloped, it would be difficult to mitigate potential adverse effects. It is likely that implementation of a Plan which evolves from this scenario would result in significant residual adverse effects on various environmental component SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	

7.8.1 The Selected Alternative Scenario

The alternative scenario for the Draft County Development Plan which has emerged from the planning/SEA process is a mixture of Scenarios A and B (see evaluations provided above). The evaluation of the combination of Scenarios A and B against the SEOs is provided on Table 7.5 below.

Elements of Scenario A which have been integrated into the Draft Plan include:

- planned higher density areas
- incentives to facilitate densification of existing areas
- focus on urban hubs
- development along existing or planned public transport corridors
- protecting the residential amenity and character
- a sustainable mix of population and employment

Elements of Scenario B which have been integrated into the Draft Plan include:

- taking into account factors including demand, economic growth and availability of funding
- ensuring the protection of environmental sensitivities
- ensuring that areas currently zoned and serviced by foul water and water supply schemes are prioritised

The Draft Plan has been developed by the Planning Team and placed on public display as the Draft Plan by the Elected Members having regard to both:

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

By complying with appropriate mitigation measures - including those which have been integrated into the Draft Plan - potential adverse environmental effects which could arise as a result of implementing this scenario would be likely to be avoided, reduced or offset. Section 9 of this report details how the Draft Plan was informed by environmental sensitivities.

Table 7.5 Evaluation of Selected Alternative Scenario against SEOs

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated
The Selected Alternative Scenario	<p>By planning higher density areas, providing incentives to facilitate densification of existing areas and providing development along existing or planned public transport corridors in a manner which is generally phased, the Draft Plan would:</p> <ul style="list-style-type: none"> • Avoid the need for unnecessary greenfield development in certain locations thereby contributing towards the protection of many environmental components SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 CH1 CH2 L1 • Help to maximise the uptake in smarter, more sustainable modes of transport and minimise transport related emissions. SEOs C1 PHH1 • Enable development to be served by existing water services and drainage infrastructure, subject to capacity being provided. SEOs M1 M2 W1 W2 W3 B1 B2 B3 S1 PHH1 		<p>By providing for infill within existing developed areas, this scenario would potentially result in a localised intensification of effects upon the protection of cultural heritage, protection of biodiversity and flood risk (cumulative loss of storage) in urban areas. SEOs CH1 CH2 B1 B2 B3 W3</p> <p>Potential adverse environmental effects arising would be present during the implementation of this scenario however it would be possible to mitigate them and residual adverse effects would be likely to be non-significant. SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>

Section 8 Evaluation of Draft Plan Provisions

8.1 Methodology

This section evaluates the provisions of the Draft Plan. The description of the environmental baseline together with the maps provided in Section 4 of this report (including the Environmental Sensitivity Overlay Mapping) is used for this purpose. Strategic Environmental Objectives (SEOs) identified in Section 5 and reproduced overleaf are also used.

The provisions of the Draft Plan are evaluated using compatibility criteria (see Table 8.1 below) in order to determine how they would be likely to affect the status of the SEOs. The SEOs and the provisions of the Draft Plan are arrayed against each other to identify which interactions - if any - would cause effects on specific components of the environment. Where the appraisal identifies a likely conflict with the status of an SEO the relevant SEO code is entered into the conflict column - e.g. B1 which stands for the SEO likely to be affected - **in this instance 'to ensure compliance with the Habitats Directive with regard to the protection of Natura 2000 Sites and Annexed habitats and species'**⁵³.

The interactions identified are reflective of likely significant environmental effects⁵⁴;

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 environmental component to which the SEO relates.
2. Interactions that would probably conflict with the status of an SEO and would be unlikely to be mitigated would be likely to result in a significant negative effect on the environmental component to which the SEO relates.
3. Interactions that would potentially conflict with the status of an SEO and would be likely to be mitigated would be likely to result in potential significant negative effects however these effects would be likely to be mitigated by measures which have been integrated into the Draft Plan.

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.

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

⁵³ 'Annexed habitats and species' refers to those listed under Annex I, II & IV of the EU Habitats Directive and Annex I of the EU Birds Directive.

⁵⁴ These effects include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects.

Table 8.1 Criteria for appraising the effect of Draft Plan provisions on SEOs

Likely to Improve status of SEOs	Probable Conflict with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	No Likely interaction with status of SEOs
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Table 8.2 Strategic Environmental Objectives⁵⁷

SEO Code	SEO
B1	To ensure compliance with the Habitats and Birds Directives with regard to the protection of Natura 2000 Sites and Annexed habitats and species ⁵⁵
B2	To ensure compliance with Article 10 of the Habitats Directive with regard to the management of features of the landscape which - by virtue of their linear and continuous structure or their function act as stepping stones (designated or not) - are of major importance for wild fauna and flora and essential for the migration, dispersal and genetic exchange of wild species
B3	To avoid significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites ⁵⁶ and to ensure compliance with the Wildlife Acts 1976-2010 with regard to the protection of listed species
PHH1	To protect populations and human health from exposure to incompatible landuses
S1	To avoid damage to the hydrogeological and ecological function of the soil resource
W1	To maintain and improve, where possible, the quality and status of surface waters
W2	To prevent pollution and contamination of ground water
W3	To comply as appropriate with the provisions of the Planning System and Flood Risk Management: Guidelines for Planning Authorities (DEHLG, 2009)
M1	To serve new development with adequate and appropriate waste water treatment
M2	To serve new development with adequate drinking water that is both wholesome and clean
M3	To reduce waste volumes, minimise waste to landfill and increase recycling and reuse
C1	To reduce travel related emissions to air and to encourage modal change from car to more sustainable forms of transport
CH1	To protect archaeological heritage including entries to the Record of Monuments and Places and/or their context
CH2	To protect architectural heritage including entries to the Record of Protected Structures and Architectural Conservation Areas and their context
L1	To minimise significant adverse visual impacts within and adjacent to the Plan area - especially having regard to the Plan Policies LHB1 to 5 which provide for the protection and management of Landscape Character Areas, the Seascape, High Amenity Zones, Historic Landscape Character Areas and Views and Prospects

⁵⁵ 'Annexed habitats and species' refer to those listed under Annex I, II & IV of the EU Habitats Directive and Annex I of the EU Birds Directive.

⁵⁶ The Planning and Development Act 2000 as amended defines a 'wildlife site'. See Section 5.2.7.

⁵⁷ See Section 5.1 for a description of Strategic Environmental Objectives.

8.2 Appropriate Assessment and Strategic Flood Risk Assessment

Appropriate Assessment (AA) Screening and a Strategic Flood Risk Assessment (SFRA) have both been undertaken alongside the Draft Plan.

The requirement for AA is provided under the EU Habitats Directive (Directive 1992/43/EEC). The **requirement for SFRA is provided under 'The Planning System and Flood Risk Management Guidelines for Planning Authorities'** (DECLG, 2009).

The AA Screening concluded that the Plan will not affect the integrity of the Natura 2000 network.

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

8.3 Potential Impacts and their Determination

Environmental impacts which occur, if any, will be determined by the nature and extent of multiple or individual projects and site specific environmental factors.

Avoidance of conflict with SEOs and the environment is dependent upon compliance with the mitigation measures which have emerged through the SEA, AA and SFRA processes and which have been integrated into the Draft Plan. The potentially significant adverse environmental effects arising from implementation of the Draft Plan are detailed in Table 8.3 below.

Table 8.3 Potentially Significant Adverse Environmental Effects arising from Draft Plan

Environmental Component	Potential Effect
Biodiversity and Flora and Fauna	<ul style="list-style-type: none"> o Loss of biodiversity with regard to Natura 2000 Sites and Annexed habitats and species (see baseline Section 4.3) o Loss of biodiversity with regard to ecological connectivity and stepping stones (see baseline Section 4.3) o Loss of biodiversity with regard to designated sites including Wildlife Sites and listed species (see baseline Section 4.3)
Population and Human Health	<ul style="list-style-type: none"> o Spatially concentrated deterioration in human health (see baseline Section 4.4)
Soil	<ul style="list-style-type: none"> o Damage to the hydrogeological and ecological function of the soil resource (see baseline Section 4.5)
Water	<ul style="list-style-type: none"> o Adverse impacts upon the status and quality of water bodies, including bathing waters (see baseline Section 4.6) o Increase in the risk of flooding (see baseline Section 4.6)
Material Assets	<ul style="list-style-type: none"> o Failure to provide adequate and appropriate waste water treatment (see baseline Section 4.8.1) o Failure to comply with drinking water regulations and serve new development with adequate drinking water that is both wholesome and clean (see baseline Section 4.8.1; water services infrastructure and capacity would be needed to ensure the mitigation of potential conflicts) o Increases in waste levels (see baseline Section 4.8.2; water services infrastructure and capacity would be needed to ensure the mitigation of potential conflicts)
Air and Climatic Factors	<ul style="list-style-type: none"> o Failure to contribute towards sustainable transport and associated impacts (see baseline Section 4.7)
Cultural Heritage	<ul style="list-style-type: none"> o Effects on entries to the Record of Monuments and Places and other archaeological heritage (see baseline Section 4.9.2) o Effects on entries to the Records of Protected Structures and other architectural heritage (see baseline Section 4.9.3)
Landscape	<ul style="list-style-type: none"> o Occurrence of adverse visual impacts (see baseline Section 4.10)

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; implementation of the Plan will not affect the interrelationships between these components. The presence of significant interrelationships between environmental components is identified on Table 8.4.

Table 8.4 Presence of Interrelationships between Environmental Components

Component	Biodiversity, flora and fauna	Population and human health	Soil	Water	Air and Climatic factors	Material assets	Cultural heritage	Landscape
Biodiversity, flora and fauna		No	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 Cumulative Effects

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

There are 2 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 the sensitivity mapping contained in Section 4 indicates an elevated level of vulnerability, future development could conflict with these cumulative environmental sensitivities and lead to a deterioration in environmental integrity. The interrelationships between environmental components that help determine these potential effects are identified on Table 8.4 in Section 8 e.g. interrelationships between: human health and water quality; human health and air quality; human health and flood risk; and ecology and water quality; and,
- Potential *inter-Plan* cumulative effects - these arise when the effects of the implementation of one plan occur in combination with those of other plans, programmes, developments, etc.

Effects that may arise as a result of implementing the Plan have been mitigated to the extent that the only residual adverse effects likely to occur as a result of implementation of the Plan are those which are identified under Section 8.6.

With regard to potential *inter-Plan* cumulative environmental effects, these occur as a result of the combination of: potential environmental effects which are identified by the assessment; and the effects arising from other legislation, plans, programmes or developments arising. Other legislation, plans, programmes or developments arising which have been considered by the assessment of environmental effects include those which are detailed under Sections 2.5, 4 and 5.

The SEA undertaken for the Plan has taken account of the Council's obligation to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

In considering the relationship with legislation and other plans and programmes it is important to note that the Plan will be implemented within areas that have existing plans and programmes for a range of sectors [e.g. water management, land use, energy] at a range of levels [e.g. National, River Basin District, Regional, County and Local] that are already subject to more specific higher and lower tier SEA and AA.

The assessment of the likely *inter-Plan* cumulative environmental effects requires knowledge of the likely effects of all plans/developments under consideration. The assessment is limited in this instance as there has been limited assessment of the likely types of developments provided for by other policies, plans and programmes that could occur in combination with the implementation of the Plan.

Taking into account available information, cumulative effects to be considered include those resulting from the Draft Plan and: other Development Plans (South Dublin, Wicklow County Council, Dublin City Council etc.); and sectoral plans (e.g. Eastern and South Eastern River Basin Management Plans 2009-2015, **Grid25 and associated Implementation Programme, Irish Water's Proposed Capital Investment Plan 2014-2016**). Such effects include:

- Potential cumulative effects upon the use of water and wastewater treatment capacity arising from new developments;
- Potential cumulative effects upon surface and ground water quality;
- Potential cumulative effects arising from linear developments including in coastal areas;
- Potential cumulative effects on flood risk by, for example, development of greenfield lands or obstruction of flood paths adjacent to the Dún Laoghaire-Rathdown County border;

- Potential cumulative effects on habitat networks arising from fragmentation occurring on both sides of the County border;

A variety of the issues covered by the Draft Plan provisions are Regional issues which are considered: at Regional Assembly level, in the Regional Planning Guidelines for the Greater Dublin Area 2010-2022 and by Planning Authorities across the Region. The solutions to these issues are often Regional solutions which are subject to their own consenting procedures. Works arising outside of the Draft Plan as a result of providing for new development within the Plan area including those arising as a result of the cumulative provision of development in the wider Dublin Region would potentially conflict with a number of environmental components, across the wider Dublin Region and beyond, including: ecology, soil function, the status of water bodies and the landscape. Some of these conflicts would be mitigated by measures integrated into the Draft Plan while some would be mitigated by measures arising out of separate consent procedures.

The SEA for the Regional Planning Guidelines for the Greater Dublin Area 2010 – 2022 makes particular reference to the potential cumulative effects in association with other relevant plans and programmes within the Greater Dublin Area including: the proposed 2030 Vision for Greater Dublin Transport; the Dodder and the Fingal East Meath Flood Risk Assessment and Management Studies; the Water Supply Project; and the relevant River Basin Management Plans.

The following Draft Plan provisions, in particular, have the potential to contribute towards potential cumulative/in-combination adverse environmental effects. These effects would be mitigated by both by measures which have been integrated into the Draft Plan (see Section 9) and by measures arising from lower tier assessments.

- Chapter 1 (Strategic Overview and Core Strategy)
- Policy RES1 (Supply of Zoned Land)
- Policy ST2 (Development of Sustainable Travel and Transportation Policies)
- Policy RET2 (Greater Dublin Area Retail Strategy)
- Policy RET3 (Retail Hierarchy)
- Policy RET5 (District Centres)
- Policy E8 (Sandyford Business Estates)
- Land Use Zoning Objectives
- Policy E15 (Water Supply and Wastewater)
- Policy E16 (Integrated Water Management Plans)
- Policy E17 (Water Quality Management Plans)
- Policy E111 (Water Services Investment Programme)
- Policy E112 (Waste Management Strategy)
- Policy E113 (Waste Plans)
- Policy CC10 (Renewable Energy)
- Policy CC11 (Wind & Wave Energy)
- Policy CC13 (Catchment Flood Risk and Management (CFRAM))
- Policy LHB14 (Regional and local networks of hiking and walking routes/trails)
- Policy OSR8 (County Greenways and external linkages and corridors)

8.6 Residual Adverse Effects

Section 9 outlines the measures that will mitigate the potential effects that are detailed under the subsections below. Residual adverse effects likely to occur - considering the extent of detail provided by the Draft Plan and assuming that all mitigation measures are complied with by development - are identified for each of the environmental components on Table 8.5.

Table 8.5 Residual Adverse Effects

Environmental Component	Residual Adverse Effects
Biodiversity and Flora and Fauna	Loss of an extent of non-protected habitats arising from the replacement of semi-natural land covers with artificial surfaces
Population and Human Health	None
Soil	Loss of an extent of soil function arising from the replacement of semi-natural land covers with artificial surfaces
Water	Flood related risks remain due to uncertainty with regard to extreme weather events
Air and Climatic Factors	None
Material Assets	Residual wastes to be disposed of in line with higher level waste management policies
Architectural Heritage	Potential alteration to the context and setting of architectural heritage (Protected Structures) however these will occur in compliance with legislation
Archaeological Heritage	Potential alteration to the context and setting of archaeological heritage (Recorded Monuments) however this will occur in compliance with legislation Potential loss of unknown archaeology however this loss will be mitigated by measures integrated into the Draft Plan
Landscape Designations ⁵⁸	None

⁵⁸ The Draft Plan contributes towards the protection of landscape designations. **The county's landscapes will change overtime as a result of natural changes in vegetation cover combined with new developments.**

8.7 Detailed Evaluation of Plan Provisions

8.7.1 Overall Findings

The overall findings (in addition to those detailed in preceding sections) are that:

- The Council have integrated all recommendations arising from the SEA and AA processes into the Draft Plan (see Section 9);
- Some Draft Plan provisions would be likely to result in significant positive effects upon all of the environmental components; and
- Some provisions would have the potential to result in significant negative environmental effects (these are described below) however these effects will be mitigated by the mitigation measures which have been integrated into the Plan (see Section 9).

8.7.2 Chapter 1: Introduction

For an explanation of SEO codes e.g. **B1, B2, B3, PHH1**, etc. refer to Table 8.2 on page 104.

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs - unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	No Likely interaction with status of SEOs
Chapter 1 provides a Strategic Overview and includes details on the County's Core Strategy and Development Areas/Regeneration within the County.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
<p>Commentary:</p> <p>The evaluation against Strategic Environmental Objectives (SEOs) provided for Chapter 1 reflects the selected alternative scenario for the Draft Plan and is consistent with the evaluation of this scenario which is provided in Section 7.</p> <p>By planning higher density areas, providing incentives to facilitate densification of existing areas and providing development along existing or planned public transport corridors in a manner which is generally phased, the Draft Plan would:</p> <ul style="list-style-type: none"> • Avoid the need for unnecessary greenfield development in certain locations thereby contributing towards the protection of many environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 CH1 CH2 L1). • Help to maximise the uptake in smarter, more sustainable modes of transport and minimise transport related emissions (SEOs C1 PHH1). • Enable development to be served by existing water services and drainage infrastructure, subject to capacity being provided (SEOs M1 M2 W1 W2 W3 B1 B2 B3 S1 PHH1). <p>By providing for infill within existing developed areas, the Draft Plan would potentially result in a localised intensification of effects upon the protection of cultural heritage, protection of biodiversity and flood risk (cumulative loss of storage) in urban areas. SEOs CH1 CH2 B1 B2 B3 W3</p> <p>Potential adverse environmental effects arising would be present during the implementation of this scenario however it would be possible to mitigate them and residual adverse effects would be likely to be non-significant (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1).</p>				

8.7.3 Chapter 2: Sustainable Communities Strategy

For an explanation of SEO codes e.g. **B1, B2, B3, PHH1**, etc. refer to Table 8.2 on page 104.

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs - unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	No Likely interaction with status of SEOs
Vision Statement				
To develop sustainable and successful communities across the County both through the continuing consolidation and redevelopment of the established built up areas, and the promotion of new, compact mixed-use urban villages optimally located in greenfield areas well served by existing or planned public transport networks and where residents will be within walking distance of supporting social and community infrastructure – including shops, services, employment opportunities, schools and leisure facilities.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
Commentary:				
<i>The Vision Statement would contribute towards sustainable mobility and minimise transport related emissions (SEOs C1 PHH1). It would also contribute towards a high quality environment, contributing towards beneficial effects upon the protection/management of all environmental components and efforts to contribute towards sustainable development (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1).</i>				
<i>There would be potential for significant adverse environmental effects to arise as a result of potential conflicts between both residential and associated development (e.g. employment, community, transport and water services infrastructure etc.) and all environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1). These would be mitigated by measures which have been integrated into the Draft Plan (see Section 9), resulting in only residual adverse effects which would be likely to be non-significant (see Table 8.5).</i>				
<i>The evaluation above reflects the selected alternative scenario for the Draft Plan and is consistent with the evaluation of this scenario which is provided in Section 7.</i>				
Residential Development				
Primary Objectives				
The primary objectives of the interim Housing Strategy are (i) to enable every household to have available to it an affordable dwelling of good quality, suited to its needs, and in the context of a high quality environment, and (ii) to ensure that Dún Laoghaire-Rathdown County Council provides for the development of sufficient housing to meet its obligations as set out in the Regional Planning Guidelines for the Greater Dublin Area 2010- 2022.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
Commentary:				
<i>See commentary under 'Vision Statement' above.</i>				
Housing				
Policy RES1: Supply of Zoned Land It is Council policy to seek to ensure that sufficient zoned land is available to satisfy the housing requirements of the County over the lifetime of the Plan thereby meeting the household/population targets set by the Regional Planning Guidelines. Policy RES2: Implementation of Interim Housing Strategy It is Council policy to facilitate the implementation and delivery of the interim Housing Strategy 2016 – 2022. Policy RES3: Residential Density* It is Council policy to promote higher residential densities provided that proposals ensure a balance between the reasonable protection of existing residential amenities and the established character of areas, with the need to provide for sustainable residential development. In promoting more compact, good quality, higher density forms of residential development it is Council policy to have regard to the policies and objectives contained in the following Guidelines: • Sustainable Residential Development in Urban Areas (DoEHLG 2009)	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	

<ul style="list-style-type: none"> • Urban Design Manual - A Best Practice Guide (DoEHLG 2009) • Quality Housing for Sustainable Communities (DoEHLG 2007) • Irish Design Manual for Urban Roads and Streets (DoTTS & DoECLG, 2013) • National Climate Change Adaptation Framework - Building Resilience to Climate Change (DoECLG, 2013). <p>Policy RES4: Existing Housing Stock and Densification*</p> <p>It is Council policy to improve and conserve housing stock of the County, to densify existing built-up areas and to retain and improve residential amenities in established residential communities.</p> <p>Policy RES5: Institutional Lands</p> <p>Where distinct parcels of land are in institutional use (such as education, residential or other such uses) and are proposed for redevelopment, it is Council policy to retain the open character and/or recreational amenity of these lands wherever possible, subject to the context of the quantity of provision of existing (or proposed) open space in the general environs.</p> <p>Policy RES6: Mews Lane Housing</p> <p>It is Council policy to facilitate measured and proportionate mews lane housing development in suitable locations.</p> <p>Policy RES7: Overall Housing Mix</p> <p>It is Council policy to encourage the establishment of sustainable residential communities by ensuring that a wide variety of housing and apartment types, sizes and tenures is provided within the County in accordance with the provisions of the Interim Housing Strategy.</p> <p>Policy RES8: Provision of Social Housing</p> <p>It is Council policy to promote the provision of social housing in accordance with the projects outlined in the Council's Interim Housing Strategy.</p> <p>Policy RES9: Housing for All</p> <p>It is Council policy to support the concept of independent and/or assisted living for older people and people with disabilities. In this regard the Council will support the provision of specific purpose-built accommodation, or adaptation of existing properties, and will promote opportunities for elderly householders to avail of the option of 'downsizing' within their community.</p> <p>Policy RES10: Homeless Accommodation</p> <p>It is Council policy to support the provision of homeless accommodation or support services throughout the County.</p> <p>Policy RES11: Traveller Accommodation</p> <p>It is Council policy to implement the 'Traveller Accommodation Programme 2014 -2018'. In accordance with the Programme, halting sites including temporary emergency halting sites and Traveller specific group housing schemes will be provided for the accommodation of Travellers who normally reside in the County and who are included in the most recent Assessment of Need for Traveller specific accommodation, in addition to providing standard social housing to meet their needs.</p> <p>Policy RES12: Provision of Student Accommodation</p> <p>It is Council policy to facilitate student accommodation on student campuses or in locations which have convenient access to Third Level colleges (particularly by foot, bicycle and high quality and convenient public transport) in a manner compatible with surrounding residential amenities. In considering planning applications for student accommodation the Council will have regard to the 'Guidelines on Residential Developments for Third Level Students' and its July 2005 Review (particularly in relation to location and design).</p> <p>Policy RES12: Provision of Women's and Family Refuges</p> <p>It is Council Policy to encourage and support any proposals from the HSE and/or other relevant agencies, which seek to provide Women's and Family Refuge facilities within the County.</p>				
<p>Commentary:</p> <p><i>These Draft Plan provisions relating to Housing will contribute towards and support the overall development approach for the County, in line with the selected alternative scenario. The evaluation above reflects the selected alternative scenario for the Draft Plan and is consistent with the evaluation of this scenario which is provided in Section 7. See also commentary under Vision Statement and Primary Objectives above.</i></p>				

Planning for Sustainable Communities				
Policy RES13: Planning for Communities* It is Council policy to plan for communities in accordance with the aims, objectives and principles of the 'Sustainable Residential Development in Urban Areas' and the accompanying 'Urban Design Manual – A Best Practice Guide'. In all new development growth areas, and in existing residential communities it is policy to ensure that proper community and neighbourhood facilities are provided in conjunction with, and as an integral component of, major new residential developments and proposed renewal /redevelopment areas, in accordance with the concept of sustainable urban villages outlined under Policy RES14.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
Policy RES14: Urban Villages* In new development growth nodes and in major areas in need of renewal/regeneration it is Council policy to implement a strategy for residential development based on a concept of sustainable urban villages.				
Commentary: <i>These provisions contain requirements which will contribute towards sustainable development and beneficial effects upon the protection/management of all environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1). As the provisions provide for new development, they present the potential for significant adverse environmental effects to arise with regard to all environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1). These effects would be mitigated by both the parts of the policies requiring development to be sustainable and the measures which have been integrated into the Draft Plan (see Section 9), resulting in only residual adverse effects which would be likely to be non-significant (see Table 8.5).</i>				
Rural Housing				
Policy RES17: Management of One-off Housing* It is Council policy to restrict the spread of one-off housing into the rural countryside and to accommodate local growth into identified small villages subject to the availability of necessary services. It is recognised that much of the demand for one-off housing is urban-generated and this can result in an unsustainable pattern of development, placing excessive strain on the environment, services and infrastructure. However, it is recognised that one-off housing may be acceptable where it is clearly shown that it is not urban-generated, will not place excessive strain on services and infrastructure, or have a serious negative impact on the landscape, and where there is a genuine local need to reside in a rural area due to locationally specific employment or local social needs (subject to compliance with the specific zoning objectives).	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
Commentary: <i>By limiting the spread of one-off housing, this policy contributes towards sustainable development and beneficial effects upon the protection/management of all environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1). Even though the policy provides for the accommodation of both local growth into selected villages and limited one-off housing (such development has the potential to result in adverse environmental effects), it contains numerous requirements for such development that will contribute towards environmental protection/management and sustainable development. Potential adverse effects would also be mitigated by measures which have been integrated into the Draft Plan (see Section 9) and residual adverse effects would be likely to be non-significant (see Table 8.5).</i>				
Sustainable Travel and Transportation				
Overarching Objectives				
All policies contained within this Chapter will support those overarching objectives which are targeted at delivering as follows: (1) An increased travel mode share for walking and cycling. This increase will be mainly related to local trips to work, schools, retail and leisure within the larger urban areas. (2) An increased travel mode share for public transport for work trips to the main employment zones of Sandyford, Cherrywood and Dublin City Centre and between the other larger urban centres. There may be scope to improve public transport mode share to larger urban centres along the main bus and rail corridors, particularly where this improves access and interchange between bicycle and rail. (3) Enhanced safety for all modes - especially for vulnerable road users. (4) The delivery of major strategic transportation projects and infrastructural improvements such as, the Council Cycle Network, an expanded Bus Network, Luas Line B2 from Brides Glen to Fassaroe and the package of interventions to realise the full potential of the Sanyford Business District. Dún Laoghaire-Rathdown County Council will strive to meet these objectives but acknowledges that timing/phasing of the delivery of these objectives will undoubtedly be affected by the availability of capital funding both from Central Government and other sources.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	

Commentary:

The Sustainable Travel and Transportation provisions will primarily contribute towards sustainable mobility and minimise transport related emissions (**SEOs C1 PHH1**). Directly (from the development and operation of transport infrastructure) and indirectly (from facilitating non-transport development) these provisions have the potential to result in significant adverse effects upon most environmental components including ecology (**B1 B2 B3**), soil function (**S1**), the status of water bodies (**W1**), flood risk (**W3**), cultural heritage (**CH1 CH2**) and the landscape (**L1**). Such effects would be mitigated by the measures which have been integrated into the Draft Plan (see Section 9). Residual adverse effects would be likely to be non-significant (see Table 8.5).

The provisions will also contribute towards and support the overall development approach for the County, in line with the selected alternative scenario – see Section 7. This overall development of the County will contribute towards sustainable development and beneficial effects upon the protection/management of all environmental components.

Planning for Sustainable Living

Policy ST1: Integration of Land Use and Transportation Policies*

It is Council policy to actively support sustainable modes of transport and ensure that land use and zoning are fully integrated with the provision and development of high public quality transportation systems.

Policy ST2: Development of Sustainable Travel and Transportation Policies*

It is Council policy to promote, facilitate and co-operate with other transport agencies in securing the implementation of **the transportation strategy for the County and the wider Dublin Region as set out in Department of Transport's 'Smarter Travel, A Sustainable Transport Future 2009 –2020' and the NTA's 'Greater Dublin Area Draft Transport Strategy 2011-2030'**. Effecting a modal shift from the private car to more sustainable modes of transport will be a paramount objective to be realised in the implementation of this policy.

Policy ST3: Accessibility*

It is Council policy to support suitable access for people with disabilities, including improvements to buildings, streets and public spaces.

**B1 B2 B3 PHH1
S1 W1 W2 W3 M1
M2 M3 C1 CH1
CH2 L1**

**B1 B2 B3 PHH1
S1 W1 W2 W3 M1
M2 M3 C1 CH1
CH2 L1**

Commentary:

See commentary under 'Overarching Objectives' above. Note that these policies provide for, inter alia, sustainable, integrated development of both land use and transport.

Walking and Cycling

Policy ST4: Walking and Cycling*

It is Council Policy to secure the development of a high quality walking and cycling network across the County in accordance with relevant Council and National policy and guidelines.

Policy ST5: Footways and Pedestrian Routes*

The Council will continue to maintain and expand the footway and pedestrian route network to provide for accessible pedestrian routes within the County in accordance with best accessibility practice.

Policy ST6: County Cycle Network*

It is Council policy to secure improvements to the County Cycle Network in accordance with the Dún Laoghaire-Rathdown Cycle Network Review whilst supporting the NTA on the development and implementation of the Cycle Network Plan for the Greater Dublin Area.

Policy ST7: Public Bike Facilities*

It is Council policy to work towards the provision of 'public bike' facilities within the key urban areas of the County.

Policy ST8: Directional/Information/Waymarking Signage

It is Council policy to provide directional signage for amenities, tourist attractions and local attractions and along cycle and pedestrian routes (waymarking) at appropriate locations throughout the County in accordance with planning and traffic regulations.

Policy ST9: Street Lighting

It is Council policy to provide and maintain street lighting on the public road/footway/cycleways throughout the County in accordance with commonly accepted best practice.

**B1 B2 B3 PHH1
S1 W1 W2 W3 M1
M2 M3 C1 CH1
CH2 L1**

**B1 B2 B3 PHH1
S1 W1 W2 W3 M1
M2 M3 C1 CH1
CH2 L1**

Commentary:

See commentary under 'Overarching Objectives' above. Note that the development of parts of the walking and cycling network adjacent to water courses and the coast may present an increased potential for adverse effects upon certain environmental components such as ecology (**B1 B2 B3**) and the status of water bodies (**W1**) to arise, however; these effects will be mitigated by various measures which have been integrated into the Draft Plan.

Public Transport				
<p>Policy ST10: Public Transport Improvements*</p> <p>It is Council policy to secure improvements to the public transport system as set out in 'Smarter Travel, A Sustainable Transport Future 2009-2020' and the NTA's 'Greater Dublin Area Draft Transport Strategy 2011-2030' by optimising existing or proposed transport corridors and interchanges and by developing new Park and Ride and taxi rank facilities at appropriate locations.</p> <p>Policy ST11: Quality Bus Network*</p> <p>It is Council policy to co-operate with the NTA and other relevant agencies to facilitate the implementation of the Bus Network measures as set out in the NTA's 'Greater Dublin Area Draft Transport 2011-2030' and to extend the bus network to other areas where appropriate subject to design, public consultation, approval, finance and resources.</p> <p>Policy ST12: Bus Rapid Transit (BRT)*</p> <p>It is Council policy to co-operate with the NTA and other relevant agencies to facilitate the introduction of Bus Rapid Transit measures as set out in the NTA's 'Greater Dublin Area Draft Transport Strategy 2011-2030' where appropriate subject to design, public consultation, approval, finance and resources.</p> <p>Policy ST13: Public Transport Interchanges*</p> <p>It is Council policy to facilitate the provision of quality public transport interchanges at strategic Rail and Luas stations within the County in accordance with National and Regional guidelines in order to facilitate focussed access to multiple public transport modes and to maximize the movement of people via sustainable modes.</p> <p>Policy ST14: Luas Extension</p> <p>It is Council policy to promote, facilitate and co-operate with other agencies in securing the extension of the Luas network in the County as set out in the NTA's 'Greater Dublin Area Draft Transport Strategy 2011-2030' and including any future upgrade to Metro.</p> <p>Policy ST15: Rail Stations/Luas Stops</p> <p>It is Council policy to co-operate with the NTA, Iarnród Éireann, the Rail Procurement Agency and other relevant authorities to secure the improvement and further development of railway stations and Luas stops in the County.</p> <p>Policy ST16: Park and Ride*</p> <p>It is Council policy to facilitate the provision of Park and Ride facilities, with suitable charging structures, in appropriate locations along strategic transport corridors.</p> <p>Policy ST17: Taxi/Minibus/Hackney Transport</p> <p>It is Council policy to facilitate the provision of taxi/minibus/hackney transport as a feeder service to major public transport corridors and to encourage the provision of taxi ranks at DART Stations, Luas Stops, key bus stations and at other appropriate locations - including within larger residential, commercial and/or mixed-use developments.</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	
<p>Commentary:</p> <p><i>See commentary under 'Overarching Objectives' above.</i></p>				
Travel Demand Management				
<p>Policy ST18: Travel Demand Management*</p> <p>It is Council policy, in conjunction and co-operation with other agencies, to implement Travel Demand Management measures aimed at reducing the demand for travel and increasing the efficiency of the transport network.</p> <p>Policy ST19: Travel Plans*</p> <p>It is Council policy to require the submission of Travel Plans for developments that generate significant trip demand. Plans should seek to reduce reliance on car-based travel and encourage more sustainable modes of transportation over the lifetime of a development.</p> <p>Policy ST20: Electric Vehicles*</p> <p>It is Council policy to support the Government's Electric Transport Programme by facilitating the roll-out of Electric Powered Vehicle Recharging Parking Bays for electric vehicles across the County through the planning system and on public roads.</p> <p>Policy ST21: Low Emission Vehicles*</p> <p>It is Council policy to support and facilitate the roll-out of alternative low emission fuel infrastructure through the Development Management process.</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	

<p>Policy ST22: Car Clubs* It is Council policy to support the set up and operation of Car Club schemes to facilitate an overall reduction in car journeys and car-parking requirements.</p> <p>Policy ST23: Control of On-Street Parking* It is Council policy to regulate and control on-street parking by discouraging commuter parking.</p>				
<p>Commentary:</p> <p><i>See commentary under 'Overarching Objectives' above. Also, by reducing the need to travel, these provisions would reduce the need for new transport infrastructure thereby avoiding potential conflicts with the environment from arising.</i></p>				
<p>Roads</p>				
<p>Policy ST24: Roads It is Council policy, in conjunction and co-operation with other transport bodies and authorities such as the NRA and the NTA, to secure improvements to the County road network – including improved pedestrian and cycle facilities.</p> <p>Policy ST25: Motorway and National Routes It is Council policy to promote, facilitate and co-operate with relevant transport bodies, authorities and agencies to secure improvements to the County's Motorway and National Road network to provide, protect and maintain for the safe and efficient movement of people and goods both within and through Dún Laoghaire-Rathdown.</p> <p>Policy ST26: Traffic and Transport Assessments and Road Safety Audits* It is Council policy to require Traffic and Transportation Assessments and/or Road Safety Audits for major developments – in accordance with the NRA 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 ST27: Traffic Noise It is Council policy 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 ST28: Road Safety It is Council policy to implement the Road Safety Plan 2013 - 2020 in conjunction with relevant stakeholders and agencies.</p> <p>Policy ST29: Traffic Management* It is Council policy 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>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	
<p>Commentary:</p> <p><i>See commentary under 'Overarching Objectives' above. These policies include provisions relating to the improvement of roads (which would benefit public transport users and sustainable mobility) and improved pedestrian and cycle facilities (SEOs C1 PHH1).</i></p>				
<p>Ports</p>				
<p>Policy ST30: Ports It is the policy of the Council to improve access to and support the continued development of Dún-Laoghaire Port in accordance with the 2013 National Ports Policy.</p>			<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	
<p>Commentary:</p> <p><i>This policy has the potential to conflict with all environmental components including those relating to coastal biodiversity and flora and fauna (B1 B2 B3), coastal waters (W1), cultural heritage (CH1 CH2) and protected views/prospects (L1). Conflicts would be mitigated by measures which have been integrated into the Draft Plan (see Section 9), resulting in only residual adverse effects which would be likely to be non-significant (see Table 8.5). It is noted that the 2013 National Ports Policy makes reference to environmental issues.</i></p>				

Financial Contributions				
Policy ST31: Section 48 and 49 Levies It is Council policy to utilise, where appropriate, the provisions of Section 48 and 49 of the Planning and Development Act, 2000 to generate financial contributions towards the capital costs of providing local and strategic transport infrastructure, services or projects in the County. This will be carried out in conjunction with adjoining Local Authorities where appropriate.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
Commentary:				
<i>This policy would contribute towards the provision of public infrastructure and facilities thereby contributing towards sustainable mobility and the minimisation of transport related emissions (SEOs C1 PHH1) and, in the case of water services, protecting environmental components such as human health, biodiversity, flora and fauna, and water (SEO PHH1 B1 B2 B3 W1 W2).</i>				
<i>The provision of public infrastructure and facilities would have the potential to conflict with all environmental components during both construction and operation and would contribute towards and support the overall development approach for the County, in line with the selected alternative scenario (see details and evaluation at Section 7). Therefore the effects arising from implementation of the selected alternative scenario are contributed towards by these provisions.</i>				
<i>Any potential adverse effects would be mitigated by measures which have been integrated into the Draft Plan (see Section 9), and residual adverse effects would be likely to be non-significant (see Table 8.5).</i>				

8.7.4 Chapter 3: Enterprise and Employment Strategy

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs - unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	No Likely interaction with status of SEOs
Vision Statement				
To encourage, support and facilitate further sustainable employment creation, economic growth and business development across a range of sectors - including retailing - by strengthening existing employment areas and revitalising town and district centres, by focusing on appropriate business support mechanisms and by capitalising upon the many inherent advantages available to the County – as evidenced by its economic profile – to improve the overall attractiveness of Dún Laoghaire–Rathdown as a vibrant place in which to set up and do business.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
Commentary:				
<i>By facilitating and assisting in job creation, economic growth and business development (which would encompass new built development and the construction and operation of infrastructure and facilities to service this development), this Vision Statement would potentially conflict with the full range of environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1). Potential adverse effects would be mitigated by measures which have been integrated into the Draft Plan (see Section 7), resulting in only residual adverse effects which would be likely to be non-significant (see Table 8.5).</i>				
<i>The Vision Statement also contributes towards and supports the overall development approach for the County, in line with the selected alternative scenario – see Section 7. This overall development of the County (which encompasses enterprise and employment development) provides for planning higher density areas, incentives to facilitate densification of existing areas and development along existing or planned public transport corridors in a manner which is generally phased. This development would:</i>				
<ul style="list-style-type: none"> • <i>Avoid the need for unnecessary greenfield development in certain locations thereby contributing towards the protection of many environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 CH1 CH2 L1).</i> • <i>Help to maximise the uptake in smarter, more sustainable modes of transport and minimise transport related emissions (SEOs C1 PHH1).</i> • <i>Enable development to be served by existing water services and drainage infrastructure, subject to capacity being provided (SEOs M1 M2 W1 W2 W3 B1 B2 B3 S1 PHH1).</i> 				
Enterprise and Employment Strategy				
The strategic vision of this Plan is to support and facilitate the economic development of the County across a range of sectors while acknowledging in particular the growing importance of the knowledge economy. The focus on employment creation will be based on consolidating the strong job generation capacity of high technology and knowledge based industries and the need for starter/incubator units to promote small to medium enterprise. It is an objective to provide for a wide range of employment needs to ensure that people with a diverse range of skill levels can both find and help	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	

<p>grow employment opportunities in the County.</p> <p>To generate sustainable economic growth, towns and cities need to be attractive places to live and work. This provides a broad agenda including everything from public transport, general affordability, cultural and recreational facilities, and the general quality of the environment. Office space needs to continue to be reconfigurable and flexible to facilitate growth. There is a need to develop premium office accommodation suited to top end, high value business activities. These are the activities most likely to be located in Ireland as low cost transactional activities move to lower cost locations abroad.</p> <p>A shift from 'high-volume jobs' to 'high-value jobs' is likely within the County as companies seek to move up the value chain and undertake higher value-added activities in Ireland. To support this, there is a need for the development of more specialised skills and expertise with a particular focus on the development of competences in innovation, product development and research and development.</p> <p>The Council will seek to work in conjunction with other Government and State agencies, to support and facilitate job creation programmes and socially useful and sustainable local industry.</p>				
<p>Commentary:</p>				
<p><i>See commentary under 'Vision Statement' above. It is noted that the strategy makes reference to the quality of the environment.</i></p>				
<p>Policies</p>				
<p>Policy E1: Lands for Employment Use It is Council policy to ensure that sufficient serviced lands are available for employment generation.</p> <p>Policy E2: Knowledge Economy It is Council policy to promote the development of knowledge-based enterprise in the County.</p> <p>Policy E3: Creative County – Culture and Creative Industries It is Council policy to promote the development of creative enterprises in the County.</p> <p>Policy E4: Third and Fourth Level Institutions It is Council policy to work in conjunction with third and fourth level institutions in the creation and fostering of enterprise through research, innovation and development activities and the commercialisation of such activities.</p> <p>Policy E5: Education and Skills It is Council policy to sustain the existing high levels of educational attainment and skilled workforce, to encourage employment generation to maintain this resource within the County and to promote the availability of education opportunities to all residents in Dún Laoghaire-Rathdown.</p> <p>Policy E6: Light Industrial and Related Uses It is Council policy, when determining planning applications on industrial sites, to consider the employment-generating value of light industry areas in the County and the value of maintaining an adequate supply of light industrial space and employment in order to help ensure a diverse range of employment opportunities in the County.</p> <p>Policy E7: Residential Use in Employment Zoned Land It is Council policy to achieve a satisfactory balance with regard to the residential component of development on lands zoned Objective 'E' to ensure that such lands remain available to facilitate their primary objective for the lands which is the encouragement of enterprise and the creation of employment. Generally, any residential development proposals on 'E' zoned lands should ensure that the employment element on site in terms of floor space should be no less than that on site prior to redevelopment and must ensure that the employment element on site in terms of overall floor space remains the primary land use.</p> <p>Policy E8: Sandyford Business Estates It is Council policy to implement the Urban Framework Plan for Sandyford.</p> <p>Policy E9: Enterprise Incubator Units It is Council policy to assist in the provision of enterprise centres in association with other agencies and in the context of local need.</p> <p>Policy E10: Office Development It is Council policy to facilitate significant office development in commercial and employment centres. The appropriate locations for office development would generally be in Major Town Centres, District Centres, and Employment zoned</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	

<p>areas.</p> <p>Policy E11: Home Working/E-Working It is Council policy to permit home-based economic activities where, by virtue of their nature and scale, they can be accommodated without detriment to the amenities of residential areas and to promote and encourage the development of 'Live-Work' units capable of accommodating home-based economic activities in areas of high density development at sustainable development locations in the County.</p> <p>Policy E12: Helipads It is Council policy to facilitate the provision of a helipad facility at the major employment cores in the County. The preferred option is for a collective facility to serve multiple users in order to avoid the proliferation of such facilities.</p> <p>Policy E13: Tourism and Recreation It is Council policy to co-operate with the appropriate agencies in promoting sustainable tourism and securing the development of tourist and recreation orientated facilities in the County.</p> <p>Policy E14: Rural Development It is Council policy 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> <p>Policy E15: Commercial Leisure It is Council policy to ensure that all major commercial leisure developments are located in accordance with a sequential test approach. The priority will be Major Town Centre locations, then District Centres and Neighbourhood Centres. Commercial leisure uses may also be considered in Employment zones. The availability of a choice of sustainable transport modes will be essential.</p>				
Commentary:				
<i>See commentary under 'Vision Statement' above.</i>				
<i>Notes:</i>				
<ul style="list-style-type: none"> • <i>Serviced land (Policy E1) would be likely to benefit the protection of environmental components including biodiversity and flora and fauna (SEOs B1 B2 B3), human health (SEO PHH1) and the status of waters (SEO W1). The construction and operation of roads, water services infrastructure, etc. would present potential adverse environmental effects – these would be mitigated by both measures which have been integrated into the Draft Plan (see Section 9) and any additional requirements arising through lower tier assessments or granting of permission.</i> • <i>The Urban Framework Plan for Sandyford which was introduced to the current Plan as a Variation underwent SEA (and Appropriate Assessment) and all SEA (and Appropriate Assessment) recommendations arising were accepted. Development under the revised Urban Framework Plan (Policy E8) will be subject to the relevant County Development Plan measures, including those that will mitigate any adverse effects arising (see Section 9).</i> • <i>Home working/e-working (Policy E11) can help to reduce the numbers of journeys taken and minimise transport related emissions (SEO C1).</i> • <i>The use of helipads (Policy E12) has the potential to be a source of noise emissions, however; this policy encourages one facility within the major employment cores rather than a proliferation throughout the County and therefore contributes towards the avoidance of future effects (SEO PHH1). Permission would need to be sought for any such proposals and they would have to comply with any requirements attached to grants of permission.</i> • <i>The reference to sustainable tourism under Policy E13 would contribute towards sustainable development and beneficial effects upon the protection/management of all environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1). As with other facilities, those related to tourism and recreation would present the potential for significant adverse environmental effects to arise with regard to all environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1).</i> • <i>Policy E14 provides for the minimisation of pollution from agricultural and industrial sources by means of development management and water pollution legislation and therefore would contribute towards the protection of environmental components including biodiversity and flora and fauna (SEOs B1 B2 B3), human health (SEO PHH1) and the status of waters (SEO W1). Potential adverse effects would be mitigated by measures which have been integrated into the Draft Plan (see Section 9) and residual adverse effects would be likely to be non-significant (see Table 8.5).</i> 				
Retail and Major Town Centres				
Strategic Context				
<p>Policy RET1: Retail Planning Guidelines It is the policy of the Council to have regard to the 'Retail Planning Guidelines for Planning Authorities' published by the Department of the Environment, Community and Local Government in 2012, in determining planning applications for retail development.</p> <p>Policy RET2: Greater Dublin Area Retail Strategy It is Council policy to have regard to the Retail Strategy for the Greater Dublin Area 2008 – 2016 but to adopt a cautionary position in relation to consideration of future retail floorspace requirements and objectives in light of changing economic circumstances.</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	

<p>Policy RET3: Retail Hierarchy It is Council policy to have regard to the 'GDA Retail Planning Strategy 2008 – 2016' and the 'GDA Regional Planning Guidelines 2010-2022', in defining the retail hierarchy of the County and defining the role of the retail centres. It is Council policy to promote the viability and vitality of its existing main retail centres while continuing to protect and improve the amenity of surrounding areas.</p> <p>Policy RET4: Major Town Centres It is Council policy to maintain the two Major Town Centres - Dún Laoghaire and Dundrum as the primary retail centres in the County. This will be reflected in the nature and scale of retail and services permitted in these centres and by the range of complementary leisure, entertainment and cultural facilities located there.</p> <p>Policy RET5: District Centres It is Council policy to maintain the District Centres at Blackrock, Stillorgan, Nutgrove and Cornelscourt and to promote a mixed-use sustainable town centre in Cherrywood in accordance with the approved SDZ Planning Scheme.</p> <p>Policy RET6: Neighbourhood Centres It is Council policy to encourage the provision of an appropriate mix, range and type of uses - including retail and retail services - in areas zoned objective 'NC' subject to the protection of the residential amenities of the surrounding area.</p> <p>Policy RET7: Convenience Shops It is Council policy to facilitate the provision of local convenience shops in residential areas where there is a clear deficiency of retail provision, subject to protecting residential amenity.</p> <p>Policy RET8: Casual Trading Areas It is Council policy to designate sites as Casual Trading Areas in suitable locations where deemed appropriate.</p> <p>Policy RET9: Non-Retail Uses It is Council policy to control the provision of non-retail uses at ground floor level in the principal shopping streets of Major Town Centres and District Centres and also within the shopping parades of Mixed-Use Neighbourhood Centres.</p> <p>Policy RET10: Retail Warehousing & Retail Parks It is Council policy to strictly control and limit additional new retail warehousing/retail park floorspace in the County for the duration of the Plan. Any limited new retail warehousing will be on lands zoned Objective 'LIW' – "To improve and provide for low density warehousing/light industrial warehousing units", MIC' – "To consolidate and complete the development of the mixed use inner core to enhance and reinforce sustainable development", 'OE' – "To provide for office and enterprise development" and 'E' – "To provide for economic development and employment" where the site has good access to a suitable road network and has access to integrated public transport. Where considered appropriate some very limited retail warehousing may be open for consideration in or near the edge of lands zoned Objective 'MTC' – "To protect, provide for and/or improve Major Town Centre facilities", but only where it can be demonstrated that the proposal will add to the centre's overall attractiveness for shopping. Any application for retail warehousing will require to demonstrate that the proposal will not impact adversely on the vitality and viability of established retail centres in accordance with the criteria set down in the 'Retail Planning Guidelines for Planning Authorities' (2012).</p> <p>Policy RET11: Additional Retail Floor Space It is Council policy, while having regard to the 'Retail Strategy for the Greater Dublin Area 2008 – 2016', to nevertheless adopt a cautionary position in relation to the provision of significant additional retail floorspace in the County for the duration of the Plan – in recognition of the dramatic slowdown in the economy resulting in lower than expected in-migration levels and consequent lower growth in overall consumer expenditure.</p> <p>Policy RET12: Assessments of Retail Proposals It is Council policy to ensure that applications for new retail development shall accord with the retail policies of the Development Plan and are objectively assessed as set out in Government Guidance in the form of the 'Retail Planning Guidelines' (2012).</p>				
<p>Commentary:</p> <p><i>See commentary under 'Vision Statement' above. In particular, these policies would contribute towards sustainable mobility and efforts to minimise increases in transport related emissions (SEOs C1 HH1).</i></p> <p>Notes:</p> <ul style="list-style-type: none"> <i>Sustainable transport (SEO C1) is one of the considerations contained in the 'Retail Planning Guidelines for Planning Authorities' and the 'Retail Strategy for the Greater Dublin Area 2008 – 2016' (Policies RET1, RET2 and RET3) which include provisions relating to Transport/Traffic Impact Assessments.</i> 				

- The Cherrywood SDZ (Policy RET5) underwent SEA (and Appropriate Assessment) and all SEA (and Appropriate Assessment) recommendations were accepted thereby contributing towards the protection/management of the environment and efforts to achieve sustainable development (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1).
- The unnecessary development of retail warehousing/retail parks outside of existing retail centres has the potential to adversely affect sustainable mobility and result in failures to minimise transport related emissions. Policy RET10 controls and limits retail warehousing/retail parks and therefore contributes towards efforts to achieve sustainable mobility and minimise transport related emissions (SEOs C1 PHH1).

Specific Retail Objectives

<p>Stillorgan District Centre</p> <ul style="list-style-type: none"> • To promote the future redevelopment of Stillorgan as a multi-faceted, mixed-use sustainable District Centre having regard to the broad objectives of the adopted Stillorgan Local Area Plan. • The regeneration and redevelopment of Stillorgan District Centre should create an urban context in respect of scale, design and layout. • Good quality residential development shall be encouraged to ensure vitality and animation both day and night. • The creation of quality spaces and enhanced public realm will be a prerequisite. • Priority movement for pedestrians, cyclists and public transport should be ensured. The influence and impact of the private car on the environs of the District Centre to be moderated. • The residential amenity of established residential areas on the fringes of the District Centre to be protected and, where possible, enhanced. • Net retail sales area in Stillorgan District Centre zoned lands to be capped at 25,000 sq.m. <p>(ii) Blackrock District Centre</p> <ul style="list-style-type: none"> • To promote the future redevelopment of Blackrock as a sustainable mixed-use District Centre having regard to the broad objectives of the proposed Blackrock Local Area Plan. • To ensure that the potential redevelopment of the Frascati and Blackrock Shopping Centres shall provide for improved linkages and pedestrian/cycle permeability across the Frascati Road and into the surrounding areas. • To examine improved car parking facilities (multi-storey and/or underground) at Frascati Shopping Centre. • To actively promote good quality residential development into a broader mix of uses. Any residential proposal, whether stand alone or in a mixed use scheme, shall include a mix of unit types. • To prepare detailed traffic management plans for Blackrock – to be incorporated as an integral component of the proposed Local Area Plan. • To encourage the renewal and provide for public realm improvement of the area between Blackrock DART Station and Main Street opening vistas to the shoreline and to improve pedestrian connections to the seafront. • To upgrade the public realm along Main Street to provide a more attractive environment for retailing. • Net retail sales area in Blackrock District Centre zoned lands to be capped at 25,000 sq. <p>(iii) Nutgrove District Centre</p> <ul style="list-style-type: none"> • To promote the regeneration and redevelopment of Nutgrove District Centre as a sustainable, multi-faceted mixed-use District Centre. • To encourage a broader range of uses into the District Centre including good quality residential, leisure and commercial office floorspace. • Net retail sales area in Nutgrove District Centre zoned lands to be capped at 25,000 sq.m. <p>(iv) Cornelscourt District Centre</p> <ul style="list-style-type: none"> • Net retail sales area in the Cornelscourt District Centre zoned lands to be capped at 25,000 sq.m. 	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	
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Commentary:

See commentary under 'Vision Statement' above.

Notes:

- Objectives for Stillorgan, Blackrock and Nutgrove District Centres (e.g. 'sustainable mixed-use', 'priority movement for pedestrians, cyclists and public transport', 'improved linkages and pedestrian/cycle permeability' and 'traffic management plans') would contribute towards sustainable mobility and efforts to minimise increases in transport related emissions (SEOs C1 PHH1).

8.7.5 Chapter 4: Green County Strategy

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs - unlikely to be mitigated	Potential Conflict with status of SEOs - likely to be mitigated	No Likely interaction with status of SEOs
Vision				
To promote and develop a coherent and integrated green infrastructure network across Dún Laoghaire–Rathdown which will secure and enhance biodiversity - including the protection of Natura 2000 sites - provide readily accessible parks, open spaces and recreational facilities, maintain historic and landscape character areas and provide for the sustainable management of water through facilitating the retention and development of a network of green spaces in urban and countryside locations to serve the needs of all citizens and communities in the County.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
Commentary:				
<p>The Green County Strategy is primarily concerned with the protection and management of the environment, benefitting environmental components including:</p> <ul style="list-style-type: none"> • Biodiversity, flora and fauna (SEOs B1 B2 B3); • Landscape (SEO L1); • Cultural heritage (SEO CH1 CH2); • Waters (SEOs W1 W2); • Soil (SEO S1); • Flood risk management (SEOs W3 PHH1); • Human health (SEO PHH1); and • Sustainable mobility and associated reductions in travel related emissions (SEO C1); <p>There would be potential for significant adverse environmental effects to arise as a result of potential conflicts between the development and improvement of this infrastructure (e.g. walking and cycling routes) and various environmental components, during construction and operation (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 CH1 CH2 L1). Adverse effects would be mitigated by both measures which have been integrated into the Draft Plan (see Section 9) and any additional requirements arising through lower tier assessments or granting of permission.</p> <p>This Vision and the Strategy which emanates from it would provide a high quality environment and provide a desirable location to prospective investors, residents and employers, thereby contributing towards and supporting the overall development approach for the County, in line with the selected alternative scenario. The evaluation above reflects the selected alternative scenario for the Draft Plan and is consistent with the evaluation of this scenario which is provided in Section 7.</p>				
Landscape				
<p>Policy LHB1: Preservation of Landscape Character Areas*</p> <p>It is Council policy to continue to preserve and enhance the character of the County's landscapes 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 – Strategy Issue Paper for Consultation' (2011). The Council shall implement any relevant recommendations contained in the Department of Arts, Heritage and the Gaelteacht's National Landscape Strategy for Ireland, 2014 - 2024 as and when it is finalised and published.</p> <p>Policy LHB2: Seascapes</p> <p>It is Council policy to carry out a Seascape Assessment in accordance with any relevant recommendations contained in the Department of Arts, Heritage and the Gaelteacht's 'National Landscape Strategy for Ireland, 2014 – 2024' as and when it is finalised and published.</p> <p>Policy LHB3: High Amenity Zones*</p> <p>It is Council policy 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 the amenities that affords them their special character.</p> <p>Policy LHB4: Historic Landscape Character Areas</p> <p>In assessing development proposals it is Council policy to have regard to the recommendations and findings of the</p>	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	

<p>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> <p>Policy LHB5: Views and Prospects It is Council policy to protect and encourage the enjoyment of views and prospects of special amenity value or special interests.</p> <p>Policy LHB6: Coastal Zone Management and Dublin Bay* It is Council policy to co-operate with the Coastal Zone Management Division of the Department of Agriculture, Food and the Marine in the preparation of the National stocking exercise and in the preparation and implementation of a National Coastal Zone Management Strategy to ensure the conservation, management and protection of man-made and natural resources of the Coastal Zone.</p> <p>Policy LHB7: Development in the 'Nearshore' area. It is Council policy to manage development in the 'Nearshore' area in accordance with the provisions of the general scheme of the Maritime and Foreshore (Amendment) Bill 2013. The 'Nearshore' extends from the High Water Mark to the Low Water Mark and is part of the Foreshore area.</p> <p>Policy LHB8: Coastline Parks and Harbours It is Council policy to continue to upgrade recreational and tourism-related amenities in the public parks and harbours along the coastline including improved accessibility by the general public.</p> <p>Policy LHB9: Beaches It is Council policy to promote the use of certain beaches for amenity and recreational use.</p> <p>Policy LHB10: Dublin Mountains Strategic Plan* It is Council policy to support the vision and objectives of the Dublin Mountains Strategic Plan for Development of Outdoor Recreation (2007-2017) including the continued development and enhancement of the Dublin Mountains Way.</p> <p>Policy LHB11: Public Rights-of-Way It is Council policy to:</p> <ul style="list-style-type: none"> • Preserve, protect, promote and improve for the common good all existing public rights-of-way which contribute to general amenity. • Create new rights-of-way or extend or enhance existing rights-of-way either by agreement with landowners or through the use of compulsory powers in the interest of ensuring access to amenities, including the coast, upland areas, river banks, heritage sites and National Monuments. • Create rights-of-way to provide linkages from the built up areas to the countryside and the coast. • Prohibit development and keep free from obstruction existing rights-of-way, and to take legal action if necessary, to prevent any attempt to close them off. • Prohibit development which would prejudice public access to existing rights-of-way, unless the level of amenity is maintained by the right of way, footpath, or bridleway being diverted by the minimum practical distance and the route continues to be segregated from vehicular traffic. • Consider favourably planning applications which include proposals to improve the condition and appearance of existing rights-of-way. <p>Policy LHB12: Recreation Access Routes It is Council policy to preserve all Recreation Access Routes which contribute to general amenity.</p> <p>Policy LHB13: National Park* It is Council policy to co-operate in the extension of the Wicklow Mountains National Park.</p> <p>Policy LHB14: Trails, Hiking and Walking Routes It is Council policy to promote the development of Regional and local networks of hiking and walking routes/trails and to develop Sli na Slainte Routes. These should be waymarked/signposted and listed where feasible and appropriate.</p> <p>Policy LHB15: Indicative Forestry Strategy* It is Council policy to take full account of the Indicative Forestry Strategy (Draft 2008) produced by the Forest Service of the Department of Agriculture, Fisheries and Food.</p> <p>Policy LHB16: Protection of Natural Heritage and the Environment* It is Council policy 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, candidate Special Areas of Conservation, proposed Natural Heritage Areas and Ramsar sites - as well</p>				
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as non-designated areas of high nature conservation value which serve as 'Stepping Stones' for the purposes of Article 10 of the Habitats Directive.				
<p>Commentary:</p> <p>See commentary on Green County Strategy Vision above.</p> <p>Notes:</p> <p>The following policies in particular have the potential to conflict with environmental components:</p> <ul style="list-style-type: none"> • Policy LHB6 (<i>'...implementation of a National Coastal Zone Management Strategy...'</i> etc.) • Policy LHB8 (<i>'...upgrade recreational and tourism-related amenities in the public parks and harbours along the coastline including improved accessibility...'</i>) • Policy LHB9: (<i>'...promote the use of certain beaches for amenity and recreational use...'</i>) • Policy LHB10 (<i>'...to support the vision and objectives of the Dublin Mountains Strategic Plan for Development of Outdoor Recreation...'</i>) • Policy LHB11 (<i>various provisions relating to Public Rights-of-Way</i>) • Policy LHB14: (<i>'...promote the development of Regional and local networks of hiking and walking routes/trails and to develop Sli na Slainte Routes....'</i>) • Policy LHB15 (<i>'...take full account of the Indicative Forestry Strategy (Draft 2008)...'</i>) <p>Adverse effects would be mitigated by both measures which have been integrated into the Draft Plan (see Section 9) and any additional requirements arising through lower tier assessments or granting of permission.</p>				
<p>Biodiversity</p>				
<p>Policy LHB17: Habitats Directive*</p> <p>It is Council policy 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 LHB18: Biodiversity Plan*</p> <p>It is Council Policy to implement the provisions of the County Biodiversity Plan 2009-2013 and to produce a second Biodiversity Plan which will be set within the context of the second National Biodiversity Plan, 'Actions for Biodiversity, 2011 – 2016' prepared by the Department of the Arts, Heritage, Gaelteacht and the Islands. Due regard shall be had to the recommendations arising from the implementation of the current 2009 – 2013 Dún Laoghaire-Rathdown Biodiversity Plan or its successor plan.</p> <p>Policy LHB19: Designated Sites*</p> <p>It is Council policy to protect and preserve areas designated as proposed Natural Heritage Areas, candidate 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 LHB20: Non-Designated Areas of Biodiversity Importance*</p> <p>It is Council policy 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, 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 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 LHB 21: County-Wide Ecological Network*</p> <p>It is Council policy to develop an Ecological Network throughout the County which will 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 LHB22 Rivers and Waterways*</p> <p>It is Council policy 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. It is also policy</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	

<p>(subject to the sensitivity of the riverside habitat) to provide public access to riparian corridors to promote improved passive recreational activities.</p> <p>Policy LHB23: Hedgerows*</p> <p>It is Council policy to protect hedgerows in the County from development, which would impact adversely upon them. It is Council policy to 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 LHB24: Geological Sites</p> <p>It is Council policy to protect 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 this Plan.</p> <p>Policy LHB25: Green Belts*</p> <p>It is Council policy to retain the individual physical character of towns and development areas by the designation of green belt areas where appropriate.</p> <p>Policy LHB26: Invasive Species</p> <p>It is Council policy to support as appropriate the National Parks and Wildlife Service efforts to seek to control and manage alien / invasive species (e.g. Japanese knotweed, Giant hogweed, Himalayan balsam, etc.) and noxious weeds (e.g. ragwort, thistle, dock, etc.) within the County.</p>				
<p>Commentary:</p> <p>See commentary on Green County Strategy Vision above.</p>				
<p>Heritage</p>				
<p>Policy LHB27: Heritage Plan</p> <p>It is Council policy to implement the second Dún Laoghaire-Rathdown Heritage Plan 'dlr Heritage Plan 2013 – 2019, Contributing towards Quality of Life'.</p> <p>Policy LHB28: The Metals</p> <p>It is Council policy 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>Policy LHB29: Historic Demesnes and Gardens</p> <p>It is Council policy that historic demesnes and gardens should be identified and protected to reflect and acknowledge their significance as part of the National heritage. The following houses and gardens are listed: Cabinteely House, Marlay House, Fernhill and Old Conna.</p> <p>Policy LHB 30: Civic Memorials.</p> <p>It is Council Policy that it will, at appropriate times and having due regard to resources and suitable subject matter, erect Civic Memorials in accordance with Part 1 of the Councils Memorials Policy adopted in April 2011 in order to raise awareness of the County's history and heritage.</p> <p>Policy LHB 31: Community Led Village Design Statements.</p> <p>It is Council policy to support proposals from local communities and community organisations that are promoting the preparation of Village Design Statements for their villages.</p> <p>Policy LHB32: Strategic Environment Assessment- Mitigation Measures*</p> <p>It is Council policy to implement the mitigation measures as set out in of the Environmental Report accompanying the Development Plan, which are envisaged to prevent, reduce and, as fully as possible, offset any significant adverse impacts on the environment of implementing the County Development Plan.</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	
<p>Commentary:</p> <p>See commentary on Green County Strategy Vision above.</p> <p>Notes:</p> <p>Policy LHB32 gives further commitment to the implementation of the mitigation measures as set out in both the Draft Plan and this SEA Environmental Report (see Section 9).</p>				

Open Spaces and Recreation				
<p>Policy OSR1: Green Infrastructure Strategy*</p> <p>It is Council policy to protect existing green infrastructure and encourage and facilitate, in consultation with relevant stakeholders, the development of new green infrastructure, recognising the synergies that can be achieved with regard to the following, sustainable transport, provision of open space amenities, sustainable management of water, protection and management of biodiversity and protection of cultural and built heritage.</p> <p>Policy OSR2: Open Space Strategy 2015-2020*</p> <p>In 2009 the Council prepared a comprehensive audit of the existing and proposed open space provision in Dún Laoghaire-Rathdown. This culminated in the publication of the Open Space Strategy for the County, for the period 2012-2015. This Strategy has subsequently been revised and a new Strategy has been prepared for the County for the period 2015-2020. The actions and recommendations detailed in the Strategy will be implemented as appropriate and as resources allow.</p> <p>Policy OSR3: Hierarchy of Parks and Open Space*</p> <p>It is Council policy to provide a hierarchy of quality parks and public open spaces which vary in size and nature and are designed to serve the needs of all members of the community, including people with mobility impairments, by being readily accessible and at a convenient distance from their home and/or places of work.</p> <p>Policy OSR4: Future Improvements</p> <p>It is Council policy to continue to improve, landscape, plant and develop more intensive recreational and leisure facilities within its parks and open spaces insofar, as resources will permit, while ensuring that the development of appropriate complementary facilities does not detract from the overall amenity of the spaces.</p> <p>Policy: OSR5: Public Open Space Standards</p> <p>It is Council policy to promote public open space standards generally in accordance with overarching Government guidance documents 'Sustainable Residential Development in Urban Areas - Guidelines for Planning Authorities' (2009) and the accompanying 'Urban Design Manual - A Best Practice Guide'.</p> <p>Policy OSR6: Allotments and Community Gardens*</p> <p>It is Council policy to support the development of additional public allotments and community gardens to improve their provision and distribution across the County.</p> <p>Policy OSR7: Trees and Woodland*</p> <p>It is Council policy to implement the objectives and policies of the Tree Strategy for the County – 'dlr TREES 2011-2015' - 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'.</p> <p>Policy OSR8: Greenways Network*</p> <p>It is Council policy 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.</p> <p>Policy OSR9: Former Ballyogan Landfill</p> <p>It is Council policy to continue the rehabilitation of the former Ballyogan landfill site and following completion of these works the site will be developed as a new public park (Jamestown Park).</p> <p>Policy OSR10: Sports and Recreational Facilities</p> <p>It is Council policy to promote the provision and management of high quality sporting and recreational infrastructure throughout the County and to ensure that the particular needs of different groups are incorporated into the planning and design of new facilities.</p> <p>Policy OSR11: Protection of Sports Grounds/Facilities</p> <p>It is Council policy to ensure that adequate playing fields for formal active recreation are provided for in new development areas and that existing sports facilities and grounds within the established urban area are protected, retained and enhanced – all in accordance with the outputs and recommendations from the Open Space Strategy 2015-2020.</p> <p>Policy OSR12: Water-Based Sports</p> <p>It is Council policy to support and encourage water-based sports and maritime leisure activities along the coast. The County features seventeen kilometres of coastline, which is a valuable asset. If utilised to its full potential it can</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	

<p>contribute to the health and well being of the residents of, and workers, in the County and can also offer significant potential for tourism growth. Policy OSR13: Play Facilities It is Council policy to support the provision of structured and unstructured play areas with appropriate equipment and facilities throughout the County and to ensure the needs of all age groups - children, teenagers, adults and older people - are facilitated in the public parks of Dún Laoghaire-Rathdown.</p>				
<p>Commentary:</p> <p>See commentary on Green County Strategy Vision above.</p> <p>Notes:</p> <p>The following policies in particular have the potential to conflict with environmental components:</p> <ul style="list-style-type: none"> • Policy OSR1 (...the development of new green infrastructure...) • Policy OSR2 (implementation of Open Space Strategy 2015-2020) • Policy OSR4 (...develop more intensive recreational and leisure facilities...) • Policy OSR8 (...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...) • Policy OSR10 (...promote the provision and management of high quality sporting and recreational infrastructure...) <p>Adverse effects would be mitigated by both measures which have been integrated into the Draft Plan (see Section 9) and any additional requirements arising through lower tier assessments or granting of permission.</p>				

8.7.6 Chapter 5: Physical Infrastructure and Management

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs - unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	No Likely interaction with status of SEOs
<p>Vision</p>				
<p>To continue protecting both the environment and the citizens of Dún Laoghaire–Rathdown through the provision of high quality, resilient environmental infrastructure and by aspiring to a carbon–neutral County through the promotion of resource preservation and energy efficiency and through the application of considered climate change mitigation policies for the duration of this Development Plan and beyond. At a more strategic level, and where considered necessary and appropriate, the Council will promote and champion the development of evidence - based climate change adaptation systems targeted at moderating the negative effects of climate change.</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	
<p>Commentary:</p> <p>The provision of environmental infrastructure (the various types of which are detailed under the provisions below) (SEOs M1 M2 M3 W3) and the application of climate change mitigation and adaptation measures (SEOs C1 W3) would benefit the protection of the environment from the adverse effects of other development as well as contributing towards sustainable development (SEOs B1 B2 B3 PHH1 S1 W1 W2). The construction and operation of environmental infrastructure and the the application of climate change mitigation and adaptation measures would potentially significantly adversely affect various environmental environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M3 CH1 CH2 L1) during both construction and operation.</p> <p>Adverse effects would be mitigated by both measures which have been integrated into the Draft Plan (see Section 9) and any additional requirements arising through lower tier assessments or granting of permission.</p> <p>The vision would contribute towards and support the overall development approach for the County, in line with the selected alternative scenario (see details and evaluation at Section 7). Therefore the effects arising from implementation of the selected alternative scenario are contributed towards by this Vision.</p>				

Water Supply and Wastewater				
<p>Policy E11: Water Supply & Appropriate Assessment It is Council policy to require that all developments relating to water supply and waste water 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.</p> <p>Policy E12: Wastewater Treatment & Appropriate Assessment* It is Council policy to provide adequate wastewater treatment facilities to serve the existing and future population of the County, subject to complying with the Water Framework Directive and the associated River Basin Management Plan or any updated version of this document, 'Water Quality in Ireland 2007-2009' (EPA 2011) 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 E13: Surface Water Drainage & Appropriate Assessment* It is Council policy to require that a Sustainable Drainage System (SuDS) is applied to any development and that site specific solutions to surface water drainage systems are developed, which meet the requirements of the Water Framework Directive and the associated River Basin Management Plans and 'Water Quality in Ireland 2007-2009' (EPA 2011) or any updated version of the document.</p> <p>Policy E14: Groundwater Protection & Appropriate Assessment It is Council policy 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.</p> <p>Policy E15: Water Supply and Wastewater* It is Council policy - in conjunction with, and the support of, Irish Water - to provide adequate high quality drinking water, to promote water conservation and 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 - all in accordance with the recommendations set out in the 'Greater Dublin Water Supply Strategic Study' and 'The Greater Dublin Strategic Drainage Study'.</p> <p>Policy E16: Integrated Water Management Plans* It is Council policy - in conjunction with, and the support of Irish Water - to contribute to the promotion of the development of Integrated Water Management Plans for the Dublin Region and to participate in any pilot scheme for the establishment of such Plans.</p> <p>Policy E17: Water Quality Management Plans It is Council policy 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.</p> <p>Policy E18: Sustainable Drainage Systems* It is Council policy to ensure that all development proposals incorporate Sustainable Drainage Systems (SuDS).</p> <p>Policy E19: Stormwater Impact Assessments* It is Council policy to ensure that all new significant developments prepare a Stormwater Impact Assessment which incorporate Stormwater Audits in accordance with the Council's Stormwater Management Plan Guidance Document and the Council's Development Management Thresholds Information Document.</p> <p>Policy E110: Storm Overflows of Sewage to Watercourses* It is Council policy to work alongside Irish Water to minimize 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 E111: Water Services Investment Programme* It is Council policy to support and co-operate with Irish Water to deliver on key water services projects as detailed within Irish Waters proposed 2014-2016 CIP and any subsequent water service plans.</p> <p>Water Supply Objectives It is an objective of the Council to facilitate and support Irish Water in the delivery and maintenance of the water supply projects listed in Table 5.1.1. It is also an objective of the Council to actively promote the implementation of the</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	

<p>following projects with Irish Water:</p> <p>(a) Rehabilitation of the water network.</p> <p>(b) Sandyford High Level Scheme Distribution Mains.</p> <p>(c) Control of Plumbosolvency (Lead Reduction) levels.</p> <p>(d) Construction of new watermains and services to the front of houses which are currently dependent on communal watermains in back gardens.</p> <p>Wastewater and Drainage Objectives</p> <p>It is an objective of the Council to facilitate and support Irish water in the delivery and maintenance of the wastewater projects listed in Table 5.1.1. It is also an objective of the Council to actively promote the implementation following projects with Irish Water:</p> <p>(a) Dún Laoghaire Main Drainage Scheme.</p> <p>(b) Carrickmines/Shanganagh Main Drainage Scheme.</p>				
<p>Commentary:</p> <p><i>These policies and objectives relate to the provision of water services (which encompasses the operation, upgrading and construction of infrastructure).</i></p> <p><i>By appropriately treating waste water (SEO M1) and providing safe drinking water (SEO M2) the protection of various environmental components would be contributed towards including:</i></p> <ul style="list-style-type: none"> • Human health; • Biodiversity, flora and fauna (SEOs B1 B2 B3); • The status of waters (SEOs W1 W2); • Flood risk management (SEOs W3 PHH1); and • Soil (SEO S1). <p><i>There would be potential for significant adverse environmental effects upon various environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 CH1 CH2 L1) to arise during construction.</i></p> <p><i>Such potential significant adverse effects could also arise during operation:</i></p> <ul style="list-style-type: none"> • Outflow could conflict with various components (SEOs W1 W2 PHH1 B1 B2 B3 S1 M2); and • Abstracting water could conflict with various components (SEOs W1 W2 PHH1 B1 B2 B3 S1). <p><i>Potential adverse effects would be mitigated by measures which have been integrated into the Draft Plan (see Section 7), resulting in only residual adverse effects which would be likely to be non-significant (see Table 8.5).</i></p> <p><i>The policies and objectives would contribute towards and support the overall development approach for the County, in line with the selected alternative scenario (see details and evaluation at Section 7). Therefore the effects arising from implementation of the selected alternative scenario are contributed towards by these provisions.</i></p> <p><i>Notes:</i></p> <ul style="list-style-type: none"> • Policy E11, Policy E12, Policy E13 and Policy E14 would contribute towards compliance with environmental legislation and the protection of various environmental components including the status of waters (SEOs W1 W2), Human health (SEO PHH1) and biodiversity, flora and fauna (SEOs B1 B2 B3). • Policy E18, Policy E19 and Policy E110 – provide for sustainable urban drainage systems and the appropriate management of storm water and storm overflows and would benefit a variety of environmental components (SEOs W1 W2 W3 PHH1 B1 B2 B3 S1 M1 M2). 				
<p>Waste Management</p>				
<p>Policy E112: Waste Management Strategy*</p> <p>It is Council policy to conform to the European Union and National Waste Management Hierarchy as follows:</p> <ul style="list-style-type: none"> • waste prevention • Minimisation • re-use • waste recycling • energy recovery and • disposal <p>subject to economic and technical feasibility and Environmental Assessment.</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	

<p>Policy EI13: Waste Plans It is Council policy to publish plans for the collection, treatment, handling and disposal of wastes in accordance with the provisions of the Waste Management Acts 1996 (as amended) and Protection of the Environment Act 2003 (as amended).</p> <p>Policy EI14: Private Waste Companies It is Council policy to ensure that all waste that is disposed of by private waste companies is done so in compliance with the requirements of the Environmental Protection Agency and the Waste Management Legislation and in accordance with the Planning Code.</p> <p>Policy EI15: Waste Prevention and Reduction* It is Council policy to promote the prevention and reduction of waste and to co-operate with industry and other agencies in viable schemes to achieve this.</p> <p>Policy EI16: Waste Re-use and Re-cycling* It is Council policy to promote the increased re-use and re-cycling of materials from all waste streams. The Council will co-operate with other agencies in viable schemes for the extraction of useful materials from refuse for re-use or re-cycling and will adopt the National targets as stated in the 'Dublin Regional Waste Management Plan 2005-2010'.</p> <p>Policy EI17: Refuse Disposal* It is Council policy to dispose of refuse by means of sanitary landfill or other suitable methods as deemed appropriate.</p> <p>Policy EI18: Hazardous Waste It is Council policy to co-operate with other agencies, to plan, organise, authorise and supervise the disposal of hazardous waste.</p> <p>Policy EI19: Rehabilitation of the Former Ballyogan Landfill It is Council policy to continue to rehabilitate the former Ballyogan landfill site and following completion of these works the site will open as a new public park (Jamestown Park).</p> <p>Waste Management Objectives It is an objective of the Council to continue the implementation of the following project, as and when necessary, and subject to the availability of appropriate approval and finance: (a) Ballyogan Recycling Park The Council intends completing the integrated Waste Management Centre at Ballyogan Recycling Park. This includes the ongoing maintenance of the civic waste facility, the provision of a large public amenity space, the installation of an organic waste composting area and the provision of a materials recovery/recycling facility.</p>				
<p>Commentary: <i>These policies and objectives provide for waste management. The implementation of these provisions, including the construction and operation of waste management infrastructure, would facilitate the reduction of waste levels (SEO M3) at the same time as presenting potential conflicts with various environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M2 CH1 CH2 L1). These conflicts would be mitigated by, inter alia, measures which have been integrated into the Draft Plan and waste plans etc.</i></p> <p><i>The provision of waste management facilities (SEO M3) in certain locations could reduce transport related emissions (SEOs C1 PHH1). Requirements to undertake lower tier environmental assessment would benefit the protection of all environmental components.</i></p> <p><i>The policies and objectives would contribute towards and support the overall development approach for the County, in line with the selected alternative scenario (see details and evaluation at Section 7). Therefore the effects arising from implementation of the selected alternative scenario are contributed towards by these provisions.</i></p>				
<p>Pollution</p>				
<p>Policy EI20: Air and Noise Pollution It is Council policy 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.</p> <p>Policy EI21: Light Pollution It is Council policy 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 EI22: Water Pollution It is Council policy 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>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3</p>			<p>C1 CH1 CH2 L1</p>

<p>Policy EI23: Rathmichael Ground and Surface Water Protection It is Council policy to refuse 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 126 Maps 10 & 14)</p> <p>Policy EI24: Litter Control It is Council policy to ensure that public places, and other areas visible to any extent from public places, within the County are maintained free of litter. It is the policy of the Council to publish plans for the prevention and control of litter and for measures to encourage public awareness with the view to eliminating litter pollution in accordance with the provisions of the Litter Pollution Act 1997.</p> <p>Policy EI25: Major Accidents It is Council policy to have regard to the provisions of the 'Major Accidents Directive' (European Council Directive 2012/18/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>				
<p>Commentary:</p> <p><i>These provisions are primarily concerned with environmental protection and management and would benefit environmental components as follows:</i></p> <ul style="list-style-type: none"> • Protection of human health (SEO PHH1); • Protection of biodiversity, flora and fauna (SEOs B1 B2 B3); • Protection of waters (SEOs W1 W2); • Protection of soil (SEO S1); • Improvements in flood risk management (SEOs W3 PHH1); • Contribution to sustainable mobility and associated reductions in travel related emissions (SEO C1); and • Provision of appropriate water and waste management services (SEOs M1 M2 M3). 				
<p>Statutory Undertakers and Telecommunications Policies</p>				
<p>Policy EI26: Energy Facilities It is Council policy to encourage the provision of energy facilities in association with the appropriate service providers and in accordance with 'Government Policy Statement on Strategic Importance of Transmission and Other Energy Infrastructure' (2012). In addition the Council will facilitate the expansion of the existing service providers, notably Bórd Gais, Eirgird and the Electricity Supply Board (ESB), in order to ensure satisfactory levels of supply and to minimise constraints for development.</p> <p>Policy EI27: Overhead Cables It is Council policy to seek the undergrounding of all electricity, telephone and television cables wherever possible, in the interests of visual amenity and public health.</p> <p>Policy EI28: Telecommunications Infrastructure It is Council policy to promote and facilitate the provision of an appropriate telecommunications infrastructure, including broadband connectivity and other technologies, within the County.</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	
<p>Commentary:</p> <p><i>The development of telecommunications has the potential to impact upon various environmental components. References to visual amenity and public health improves the status of SEOs.</i></p> <p><i>The policies and objectives would contribute towards and support the overall development approach for the County, in line with the selected alternative scenario (see details and evaluation at Section 7). Therefore the effects arising from implementation of the selected alternative scenario are contributed towards by these provisions.</i></p>				
<p>Climate Change Adaptation</p>				
<p>Policy CC1: National Climate Change Adaptation Framework.* It is Council policy to implement the 'National Climate Change Adaptation Framework - Building Resilience to Climate Change' by supporting the preparation of a Climate Change Adaptation Plan.</p> <p>Policy CC2: Development of National Climate Change Policy and Legislation.* It is Council policy to support on an ongoing basis the Government programme for the development of a 'National Climate Change Policy and Legislation' through the inclusion and implementation of supporting and complementary County Development Plan policies.</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M2 M3 CH1 CH2 L1</p>	

Commentary:

The detail of future climate change policy and legislation is uncertain however it is likely to be consistent with the National Climate Change Policy Framework. This Framework provides a strategic policy focus to ensure adaptation measures are taken across different sectors and levels of government to reduce Ireland's vulnerability to the negative impacts of climate change.

Climate change adaptation measures have the potential to result in beneficial significant environmental effects:

- Land use planning, providing for the location of new development close to existing development and serviced by public transport, at an appropriate density, can reduce the need to travel by car and contribute towards increases in sustainable mobility and reductions in greenhouse gas emissions (**SEO C1**).
- Adaptation measures such as flood risk management infrastructure and coastal zone management could, inter alia, help to protect humans (**SEO PHH1**) from flood risk (**SEO W3**), prevent the loss of biodiversity and heritage (**SEOs B1 B2 B3 CH1 CH2 L1**) and protect existing infrastructure and services (**SEOs M1 M2 M3 W1 W2**) with resultant protection of the status of waters and soils during flood events (**SEOs W1 W2 S1**).
- The development of green infrastructure could: contribute towards increases in sustainable mobility and reductions in greenhouse gas emissions (**SEO C1**); minimise increases in flood risk (**SEO W3**) and protect human health (**SEO HH1**); contribute towards the provision of various services and the sustainable management of water (**SEOs M1 M2 M3**); protect and manage biodiversity and water quality (**SEOs B1 B2 B3 W1 W2**); and protect cultural heritage and landscape sensitivities (**SEOs CH1 and CH2**).

Certain climate change adaptation actions such as flood defence infrastructure and the development of green infrastructure have the potential to result in significant adverse environmental effects during construction and operation on most environmental components (**B1 B2 B3 PHH1 S1 W1 W2 W3 M2 M3 CH1 CH2 L1**). These types of infrastructure are often constructed in ecologically and visually sensitive areas along the coast and adjacent to the banks of rivers and streams. Potential adverse effects would be mitigated both by measures which have been integrated into the Draft Plan (see Section 9) and by measures arising from lower tier assessments.

Energy Efficiency and Energy Efficient Design

Policy CC3: Development of National Energy Policy and Legislation.*

It is Council policy to support on an ongoing basis the Government Programme for the development of an 'Energy Policy and Legislation' through the implementation of supporting policies in this County Development Plan - particularly those promoting use of renewable energy sources, energy efficiency, sustainable transport and land use planning.

Policy CC4: Sustainable Energy Action Plan*

It is the Council policy, in consultation with relevant stakeholders, to prepare a 'Sustainable Energy Action Plan'.

Policy CC5: Limiting Emissions of Greenhouse Gases.*

It is Council policy to support National and International initiatives for limiting emissions of greenhouse gases.

Policy CC6: Energy Performance in Existing Buildings*.

It is Council policy to promote innovative building design that demonstrates a high level of energy conservation, energy efficiency and use of renewable energy sources in existing buildings.

Policy CC7: Energy Performance in New Buildings.*

It is Council policy to promote and support new development that is low carbon development, is well adapted to the impacts of climate change and that energy conservation is considered and designed at the earliest stages through the use of energy efficiency management system.

Policy CC8: Excellence in the Built Environment.*

It is Council policy to lead by example by developing a strategy for effective climate protection within its building stock.

Policy CC9: Sustainability in Adaptable Design*.

It is Council policy 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.

Policy CC10: Radon Gas

It is Council policy, in partnership with other relevant agencies, to promote best practice in the implementation of radon prevention measures.

**B1 B2 B3 PHH1
S1 W1 W2 W3 M1
M2 M3 C1 CH1
CH2 L1**

**B1 B2 B3 PHH1
S1 W1 W2 W3 M2
M3 CH1 CH2 L1**

Commentary:

These provisions promote, inter alia, sustainable transport and land use planning (this supports the overall development approach - see evaluation under Section 8.7.3) and renewable energy sources (see evaluation below).

The provisions would contribute towards achieving various government objectives relating to the amount of energy to be consumed from renewable sources and reducing greenhouse gas emissions. Such development has, however, the potential to impact upon various environmental components. Potential adverse effects would be mitigated both by measures which have been integrated into the Draft Plan (see Section 9) and by measures arising from lower tier assessments.

Notes:

- Policies CC6 and CC8 potentially conflict with the protection of cultural heritage (**SEOs CH1 CH2**).
- Policy CC10 contributes towards the protection of human health (**SEO PHH1**).

Renewable Energy

Policy CC10: Renewable Energy.*

It is Council policy to support National and International initiatives to encourage the development and use of renewable energy sources.

Policy CC11: Wind & Wave Energy*.

It is Council policy to support and promote, in conjunction with other relevant agencies, wind energy initiatives – both on-shore and offshore – when these are undertaken in an environmentally acceptable manner.

Policy CC12: Small-Scale Wind Energy Schemes*.

It is Council policy to encourage small-scale wind energy developments within industrial areas, and support small community-based proposals in urban areas provided they do not negatively impact upon the environmental quality or residential amenity of the area.

**B1 B2 B3 PHH1
S1 W1 W2 W3 M2
M3 CH1 CH2 L1**

M1 C1

Commentary:

The development of renewable energy sources would contribute towards achieving various government objectives relating to the amount of energy to be consumed from renewable sources and reducing greenhouse gas emissions. Such development has, however, the potential to impact upon various environmental components. Further general commentary on the types of potential effects arising from different renewable energies is provided below. Potential adverse effects would be mitigated both by measures which have been integrated into the Draft Plan (see Section 9) and by measures arising from lower tier assessments.

Wind Energy

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

Potential Negative Effects, if unmitigated:

- Potential impacts include those associated with construction and operation of the turbines and ancillary facilities and infrastructure (including roads and electrical infrastructure)
- Potential human health impact: shadow flicker, noise, and impacts arising from bog bursts and landslides
- Potential impact upon designated and non-designated biodiversity and flora and fauna including birdlife
- Potential interactions leading to change in structure of soil and geology and changes to drainage
- Potential impacts on water status during construction - this could interact with drinking water sources and biodiversity
- Potential impacts upon the context of protected archaeological and architectural heritage - including the context of this heritage - as well as unknown archaeological heritage
- Potential impacts upon traffic during construction due to transportation of turbine components
- Changes to the character of areas would be likely to occur however visual impacts would depend on various factors including the size, number and spacing of the turbines, perception of the relevant areas and any cumulative effect arising from multiple wind farms

Wave Energy

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

Potential Negative Effects, if unmitigated:

- On biodiversity, in particular aquatic biodiversity
- Interactions with navigation routes
- Changes in sediment regimes (could affect beaches, for example)
- Effects on water column structure and flows Effects with respect to coastal flood risk
- Potential interactions leading to change in structure of sea bed/geology
- Changes to the character of coastal locations could occur however visual impacts would depend upon the size and design of the installation, ancillary facilities and the perception and visibility of the relevant area

Hydropower

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

Potential Negative Effects, if unmitigated:

- Depending on the scale and location of the development there is potential for impacts to occur on biodiversity, in particular aquatic biodiversity
- Potential to impact upon the morphological, biological and chemical status of waters - this could interact with drinking water sources (in freshwater) and biodiversity
- Potential interactions leading to change in structure of soil and geology

- Operation could impact upon flood risk elsewhere
- Potential impacts upon archaeological heritage or nearby architectural heritage, including context
- Changes to the character of locations may occur however visual impacts would depend upon, inter alia, the size of the installation, ancillary facilities and the perception and visibility of the relevant area

Bio-Energy

Positive Effects: Contribution towards renewable energy and minimisation of greenhouse gases targets. Can provide for the use of agricultural and other wastes

Potential Negative Effects, if unmitigated:

- Potential impact upon designated and non-designated biodiversity and flora and fauna arising from changes in vegetation. Soil structure may also be impacted upon.
- Changes in farming practices may lead to changes in drainage and runoff which could impact upon biological and chemical status of waters - - this could interact with drinking water sources and biodiversity
- Potential human health impact: odour and noise from operation of plants
- Potential impacts upon traffic during operation due to transportation of fuel to plants
- Fuels derived from bio-mass still produce emissions however these are less than those derived from fossil fuels
- Changes to the land cover of areas could occur however visual impacts would depend on perception of the relevant area:
- Biomass plants may have visual impacts - these would depend on perception of the relevant area

Solar Energy and Solar Thermal Energy

Positive Effects: Contribution towards renewable energy targets

Potential Negative Effects, if unmitigated:

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

Geothermal Energy

Positive Effects: Contribution towards renewable energy targets

Potential Negative Effects, if unmitigated:

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

Flood Risk

Policy CC13: Catchment Flood Risk and Management (CFRAM)*.
 It is Council policy to assist the Office of Public Works (OPW) in the preparation of the Regional Catchment Flood Risk Assessment and Management (CFRAM) Study being carried out for the Eastern District. Any recommendations and outputs arising from the CFRAM study for the Eastern District that are relevant for Dún Laoghaire-Rathdown will require to be incorporated into the Development Plan.
 Policy CC14: Flood Risk Management*.
 It is Council policy to support, in cooperation with the OPW, the implementation of the EU Flood Risk Directive (2007/60/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 (CFRAMS).

<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M2 M3 CH1 CH2 L1</p>	
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Commentary:

These provisions are primarily concerned with flood risk management and would benefit environmental components as follows:

- The protection of human health from flood risk (**SEOs PHH1 W3**) while (through the Justification Test provided for by the Department's 2009 'The Planning System and Flood Risk Management') allowing for the development of areas which would improve sustainable mobility levels (**SEO C1**);
- The protection of biodiversity, flora and fauna and cultural heritage (**SEOs B1 B2 B3 CH1 CH2**); and
- Protect existing infrastructure and services (**SEOs M1 M2 M3**) with resultant protection of the status of waters and soils during flood events (**SEOs W1 W2 S1**).

Flood risk management infrastructure and coastal defences have the potential to result in significant adverse environmental effects during construction and operation on most environmental components (**B1 B2 B3 PHH1 S1 W1 W2 W3 M2 M3 CH1 CH2 L1**). These types of infrastructure are often constructed in ecologically and visually sensitive areas along the coast and adjacent to the banks of rivers and streams. Potential adverse effects would be mitigated both by measures which have been integrated into the Draft Plan (see Section 9) and by measures arising from lower tier assessments.

8.7.7 Chapter 6: Built Heritage

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs - unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	No Likely interaction with status of SEOs
Vision				
To ensure that the protection and conservation of the outstanding architectural and archaeological built heritage of Dún Laoghaire-Rathdown forms an integral and component part in the continuing sustainable development of the County and that this valuable, and in many instances non-renewable, resource continues to be safeguarded through proper management, sensitive enhancement and appropriate development and re-development.	CH1 CH2 L1			B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1
Commentary:				
This Vision would be likely to protect architectural and archaeological heritage (SEOs CH1 CH2) including context and contribute towards the management of the landscape (SEO L1).				
Archaeological Heritage				
Policy AH1: Protection of Archaeological Heritage It is Council policy to protect archaeological sites, National Monuments (and their settings), which have been identified in the Record of Monuments and Places (RMP). Policy AH2: Protection of Archaeological Material in Situ It is Council policy to seek the preservation in situ (or 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 Arts, Heritage and the Gaeltacht (DoAHG). Policy AH3: Protection of Historic Towns It is Council policy to protect the Historic Town of Dalkey as identified by the Department of Arts, Heritage and the Gaeltacht (DoAHG). Policy AH4: Carrickmines Castle Site It is Council Policy to produce a Conservation Plan for the Carrickmines Castle Site. Policy AH5: Historic Burial Grounds It is Council policy to protect historical burial grounds within the County and encourage their maintenance in accordance with good conservation practice. Policy AH6: Underwater Archaeology It is Council policy 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.	CH1 L1 CH2 B1 B2 B3 S1 PHH1 W1 W2 W3			M1 M2 M3 C1

Commentary:

These provisions would be likely to protect archaeological heritage (*SEO CH1*) including context and contribute towards the management of the landscape (*SEO L1*). They also have the potential to contribute towards the protection of nearby architectural heritage (*SEO CH2*). By limiting the development of the settings of archaeological heritage, the provisions also have the potential to improve other environmental components including *biodiversity, flora and fauna, soil, water, human health and flood risk management (SEOs B1 B2 B3 S1 PHH1 W1 W2 W3)*.

Architectural Heritage

Policy AR1: Record of Protected Structures

It is Council policy to:

- i. 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 (RPS).
- ii. Protect structures included on the RPS from any works that would negatively impact their special character and appearance.
- iii. Ensure that any development proposals to Protected Structures, their curtilage and setting shall have regard to the **Department of the Arts, Heritage and the Gaeltacht 'Architectural Heritage Protection Guidelines for Planning Authorities'** (2004), and
- iv. Ensure that new and adapted uses are compatible with the character and special interest of the Protected Structure.

Policy AR2: Protected Structures Applications and Documentation

It is Council policy to require all planning applications relating to Protected Structures to contain the appropriate level of documentation in accordance with Article 23 (2) Planning Regulations and Chapter 6 and Appendix B of the Architectural Heritage Protection Guidelines for Planning Authorities, or any variation thereof.

Policy AR3: Protected Structures and Building Regulations

It is Council policy to protect the character and special interest of Protected Structures when carrying out interventions to comply with the requirements of the Building Regulations - with particular reference to Part B and Part M.

Policy AR4: National Inventory of Architectural Heritage (NIAH)

It is Council policy to review and update the RPS on foot of any Ministerial recommendations following the completion of the National Inventory of Architectural Heritage (NIAH).

Policy AR5: Buildings of Heritage Interest

It is Council policy to:

- 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 a 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.
- ii. Identify buildings of vernacular significance with a view to assessing them for inclusion in the Record of Protected Structures

Policy AR6: Protection of Buildings in Council Ownership

It is Council policy to continue to demonstrate best practice with regard to Protected Structures, Recorded Monuments and often elements of architectural heritage in its ownership and care.

Policy AR7: Energy Efficiency of Protected Structures

It is Council policy to have regard to the Department of Environment, Heritage and Local Government's publication on 'Energy Efficiency in Traditional Buildings' and any future advisory documents in assessing proposed works on Protected Structures.

Policy AR8: Nineteenth and Twentieth Century Buildings, Estates and Features

It is Council policy to:

- i. Encourage the appropriate development of exemplar nineteenth and twentieth century buildings and estates to ensure their character is not compromised.
- ii. Encourage the retention 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.

Policy AR9: Protection of Historic Street Furniture

It is Council policy to:

- i. Preserve the retention of historic items of street furniture where these contribute to the character of the area.

<p>ii. Promote high standards for design, materials and workmanship in public realm improvements within areas of historic character. Policy AR10: Protection of Coastline Heritage It is Council policy to:</p> <p>i. Encourage the retention of features of the County's coastal heritage where these contribute to the character of the area. ii. Have regard to those items identified in the Coastal Architecture Heritage Survey when assessing any development proposals. Policy AR11: Industrial Heritage It is Council policy to:</p> <p>i. Have regard to those items identified in the Industrial Heritage Survey listed in Appendix 5 when assessing any development proposals. ii. Identify further sites of industrial heritage significance with a view to assessing them for inclusion in the Record of Protected Structures. Policy AR12: Architectural Conservation Areas It is Council policy to:</p> <p>i. Protect the character and special interest of an area which has been designated as an Architectural Conservation Area (ACA). 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. 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. iv. Ensure street furniture is kept to a minimum, is of good design and any redundant street furniture removed. v. Seek the retention of all features that contribute to the character of an ACA including boundary walls, railings, soft landscaping, traditional paving and street furniture. Policy AR13: Demolition within an ACA It is Council policy to prohibit the demolition of a structure(s) that positively contributes to the character of the ACA. Policy AR14: Shopfronts within an ACA It is Council policy 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. ii. Ensure that new shopfronts are well-designed, through the sympathetic use of scale, proportion and materials (Refer also Chapter 8, Section 8.2.6.8). Policy AR15: Public Realm and Public Utility works within an ACA It is Council policy to:</p> <p>i. Retain any surviving items of historic street furniture and finishes such as granite kerbing and paving that contribute to the character of an ACA 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. iii. Encourage the undergrounding of over-head services and the removal of redundant wiring/cables within an ACA. Policy AR16: Candidate Architectural Conservation Areas (cACA) It is Council policy to assess candidate Architectural Conservation Areas (cACA) to determine if they meet the requirements and criteria for re-designation as Architectural Conservation Areas. Policy AR17: Development within a cACA It is Council policy 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>				
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Commentary:

These provisions would be likely to protect architectural heritage (*SEO CH2*) including context and contribute towards the management of the landscape (*SEO L1*). They also have the potential to contribute towards the protection of nearby archaeological heritage (*SEO CH1*). By limiting the development of the settings of architectural heritage, the provisions also have the potential to improve other environmental components including *biodiversity, flora and fauna, soil, water, human health and flood risk management (SEOs B1 B2 B3 S1 PHH1 W1 W2 W3)*.

8.7.8 Chapter 7: Community Strategy

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs - unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	No Likely interaction with status of SEOs
Vision and Objectives				
To promote social inclusion and enhanced 'quality of life' through integrating the continued sustainable growth and planning of Dun Laoghaire-Rathdown with its social and community development by ensuring the retention, provision and maintenance of well considered and appropriate levels of social, community and cultural infrastructure readily accessible to all citizens of, and visitors to, the County.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
Social, Community & Cultural Development Objectives In seeking to secure a balanced social, community and cultural infrastructure in Dún Laoghaire-Rathdown, the broad objectives of the Plan will be: <ul style="list-style-type: none"> To facilitate the delivery of the goals identified in the Council's Local Economic and Community Plan (LECP) currently in preparation. To develop and support sustainable neighbourhoods into the future through the commensurate and proper integration of housing with quality social and community infrastructure such as schools, amenities and childcare facilities - all in accordance with the 'Sustainable Residential Development in Urban Areas', (Department of the Environment, Heritage and Local Government (DoEHLG) 2009) Guidelines. To ensure a balanced and equitable provision of social and community facilities throughout the County including housing for all, day care facilities for all, community centres, sports facilities etc. To facilitate the provision of accessible facilities and services through a participatory community development process that is responsive to the identified needs of the local community including the provision of local community/resource centres, recreational amenities and sporting facilities. To engage with key stakeholders, including community groups, to develop a shared responsibility for social, community and cultural development in the County. To help people to help themselves. 	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
<p>Commentary:</p> <p><i>By providing for the development of social, community and cultural facilities (which would encompass new built development and the construction and operation of infrastructure to service this development), these provisions would potentially conflict with the full range of environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1). Potential adverse effects would be mitigated by measures which have been integrated into the Draft Plan (see Section 7), resulting in only residual adverse effects which would be likely to be non-significant (see Table 8.5).</i></p> <p><i>These provisions also contribute towards and support the overall development approach for the County, in line with the selected alternative scenario – see Section 7. This overall development of the County (which encompasses social, community and cultural development) provides for planning higher density areas, incentives to facilitate densification of existing areas and development along existing or planned public transport corridors in a manner which is generally phased. This development would:</i></p> <ul style="list-style-type: none"> <i>Avoid the need for unnecessary greenfield development in certain locations thereby contributing towards the protection of many environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 CH1 CH2 L1).</i> <i>Help to maximise the uptake in smarter, more sustainable modes of transport and minimise transport related emissions (SEOs C1 PHH1).</i> <i>Enable development to be served by existing water services and drainage infrastructure, subject to capacity being provided (SEOs M1 M2 W1 W2 W3 B1 B2 B3 S1 PHH1).</i> <p><i>Notes:</i></p> <ul style="list-style-type: none"> <i>The specific content of the Council's Local Economic and Community Plan (LECP) is not finalised.</i> <i>The equitable distribution of social, community and cultural facilities throughout the County would contribute towards sustainable mobility and minimise transport related emissions (SEOs C1 PHH1).</i> <i>The 'Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas' contain many provisions which would be likely to contribute towards sustainable development and environmental protection/management, including those relating to conservation of the built and natural environment (including flood risk, historic buildings and sustainable urban drainage systems) and provision of community facilities and efficient use of resources (which relate to, inter alia,, sustainable mobility).</i> 				

Policies				
<p>Policy SCC1: The Local Economic and Community Plan It is Council policy to promote and facilitate participation of key stakeholders in the development and delivery of the Local Economic and Community Plan.</p> <p>Policy SSC2: Social Inclusion and Participation It is Council policy to progressively reduce all forms of social exclusion that can be experienced because of gender, marital status, family status, age, race, religion, disability, sexual orientation, nationality, homelessness and membership of the traveller community.</p> <p>Policy SCC3: Safer Living Environment It is Council policy to facilitate the promotion and delivery of a safe environment for both the residents of, and visitors to, the County.</p> <p>Policy SSC4: Estate Management It is Council policy to support, as resources allow, the continued delivery of Estate Management structures and programmes in areas identified with a high proportion of Council-owned properties.</p> <p>Policy SCC5: Community Facilities It is Council policy to support the development and provision of a wide range of community facilities distributed in an equitable manner throughout the County.</p> <p>Policy SSC6: New Development Areas It is Council policy to ensure that proper community infrastructure and complementary neighbourhood facilities are provided concurrently with the development of new residential growth nodes in the County.</p> <p>Policy SSC7: Schools It is Council policy to ensure the reservation of primary and post-primary school sites in accordance with the requirements of the relevant education authorities.</p> <p>Policy SSC8: Third and Fourth Level Education Facilities It is Council policy to support the development and ongoing provision of Third and Fourth Level Institutions in the County including University College Dublin (Belfield and Carysfort campuses), Dún Laoghaire Institute of Art, Design and Technology and Blackrock Further Education Institute (Formerly Senior College Dún Laoghaire).</p> <p>Policy SSC9: Health Care Facilities It is Council policy to support the Health Service Executive and other statutory and voluntary agencies in the provision of appropriate healthcare facilities - including the system of hospital care and the provision of community-based primary care facilities. It is Council policy to encourage the integration of appropriate healthcare facilities within new and existing communities.</p> <p>Policy SSC10: Childcare Facilities It is Council policy to encourage the provision of affordable and appropriate childcare facilities as an integral part of proposals for new residential developments and to improve/expand existing childcare facilities across the County. In general one childcare facility should be provided for all new residential developments subject to demographic and geographic needs. The Council will encourage the provision of childcare facilities in a sustainable manner to encourage local economic development and to assist in addressing disadvantage.</p> <p>Policy SSC11: Arts and Culture It is Council policy to facilitate the continued development of arts and cultural facilities throughout Dún Laoghaire-Rathdown in accordance with the County 'Arts Development Policy, 2011-2014'.</p> <p>Policy SSC12: Libraries It is Council policy to promote and develop the County Library Service in accordance with the National objectives laid down in the draft 'Strategy for Public Libraries, 2013 – 2017' prepared by the Department of the Environment, Community and Local Government. The County's network of Carnegie Libraries shall be retained for public and community use.</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	
<p>Commentary:</p>				
<p>See commentary under 'Vision and Objectives' above.</p>				

Notes:

- The specific content of the Council's Local Economic and Community Plan (LECP) is not finalised (Policy SCC1).
- The equitable distribution of community facilities throughout the County and the provision of community infrastructure and complementary neighbourhood facilities concurrently with the development of new residential growth nodes would contribute towards sustainable mobility and minimise transport related emissions (SEOs C1 PHH1).

8.7.9 Chapter 8: Principles of Development

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs - unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	No Likely interaction with status of SEOs
<p>Vision</p> <p>To ensure that all new development and redevelopment proposals in the County adhere to the principles of good urban design and contribute to the delivery of a 'sense of space', through the promotion of a high quality built environment utilising considered design and development standards. The orderly and sustainable delivery of new developments, of many diverse types and scales, will be realised through the application of the various standards and objectives embedded in the Development Plan via the Development Management process and adherence to the overarching Land Use Zoning imperatives.</p>	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1			
<p>Commentary:</p> <p>The promotion of a high quality built environment would be likely to contribute towards:</p> <ul style="list-style-type: none"> • Sustainable mobility and noise and air pollution (SEOs C1 PHH1); • Protection/management of Biodiversity (SEOs B1 B2 B3); • Flood risk management (SEOs W3 PHH1); • Sustainable urban drainage systems (SEOs W1 W2 W3 PHH1 B1 B2 B3 S1 M1 M2); • Waste management (SEO M3); • Protection of views (SEO L1); and • Protection/management of archaeological and architectural heritage (SEOs CH1 CH2). <p>The Vision provides for the realisation of development in a sustainable manner through the application of the various standards and objectives encompassed in the Development Plan (various standards and objectives would be likely to contribute towards both sustainable development and beneficial effects upon the protection/management of all environmental components SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1).</p>				
<p>Urban Design</p> <p>Policy UD1: Urban Design Principles It is Council policy to ensure that all new development is of high quality design that assists in promoting a 'sense of place'. The Council will promote the guidance principles set out in the 'Urban Design Manual – A Best Practice Guide' (2009), and in the 'Design Manual for Urban Roads and Streets' (2013) and will seek to ensure that development proposals are cognisant of the need for proper consideration of context, connectivity, inclusivity, variety, efficiency, distinctiveness, layout, public realm, adaptability, privacy and amenity, parking, and detailed design.</p> <p>Policy UD2: Design Statements It is Council policy that, for all medium-to-large scale and complex planning applications (30 + residential units, commercial development over 1,000 sq.m. or as required by the Planning Authority) a 'Design Statement' shall be required to demonstrate how the proposed development addresses or responds to the design criteria set out in the 'Urban Design Manual - A Best Practice Guide' (DoEHLG, 2009).</p> <p>Policy UD3: Public Realm Design It is Council policy that all development proposals, whether in established areas or in new growth nodes, should contribute positively to an enhanced public realm and should demonstrate that the highest quality in public realm design is achieved.</p>	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1			

<p>Policy UD4: Local Area Plans It is Council policy to use the vehicle of Local Area Plans and/or Urban Framework Plans, as appropriate, to promote and embed the principles of good urban design in the delivery of new, and existing, sustainable communities in specific areas of the County.</p> <p>Policy UD5: Shared Space Layouts It is Council policy to promote safer and more attractive streets and public realm for all road users throughout the County by pro-actively engaging with, and adhering to, the 'shared space' concept and guidance set out in the 'Design Manual for Urban Roads and Streets' (2013).</p> <p>Policy UD6: Building Height Strategy It is Council policy to adhere to the recommendations and guidance set out within the Building Height Strategy for the County.</p> <p>Policy UD7: Urban Tree Planting It is Council policy to promote urban tree planting throughout the County in accordance with the provisions of 'dlr TREES: A Tree Strategy for Dún Laoghaire-Rathdown 2011 – 2015'.</p>				
<p>Commentary:</p> <p><i>These provisions will ensure that new development is of high quality design. The provisions are consistent with – and reference – the guidance principles set out in the 'Urban Design Manual – A Best Practice Guide' (2009) and the 'Design Manual for Urban Roads and Streets' (2013). These Manuals include references to the consideration of the following in the design of development:</i></p> <ul style="list-style-type: none"> • Sustainable mobility and noise and air pollution (SEOs C1 PHH1); • Biodiversity (SEOs B1 B2 B3); flood risk (SEOs W3 PHH1); • SUDS (SEOs W1 W2 W3 PHH1 B1 B2 B3 S1 M1 M2); • Waste management (M3); • Views (SEO L1); and • Cultural or historical connections (SEOs CH1 CH2). <p><i>The County's Building Height Strategy would be likely to contribute towards the protection of the context of cultural heritage and landscape sensitivities (SEOs CH1 CH2 L1) and help minimise unnecessary greenfield development (and associated potential adverse environmental effects) by maximising new development where it occurs.</i></p> <p><i>With regard to Policy UD7, trees can improve local air and water quality (SEOs C1 W1 W2), reduce traffic noise, mitigate visual effects (SEOs L1 CH1 CH2) and contribute towards the protection/management of ecology (SEOs B1 B2 B3).</i></p>				
<p>Development management standards and land use zoning objectives</p>				
<p>Detail not included. Please refer to refer to relevant sections of the Draft Plan.</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	
<p>Commentary:</p> <p><i>The land use zoning objectives provided for by the Plan reflect the selected alternative scenario for the Draft Plan. The above evaluation is consistent with that provided for by the selected alternative scenario at Section 7.</i></p> <p><i>A number of the development management standards are identified in Section 9 of this report as measures that will mitigate the effects of implementing the Plan and contribute towards environmental protection/management and sustainable development.</i></p>				

8.7.10 Specific Local Objectives

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs - unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	No Likely interaction with status of SEOs
<p>Overarching Commentary:</p> <p><i>It is the Council's vision to initiate and/or give effect to the package of Specific Local Objectives evaluated below within the lifetime of the 2016-2022 County Development Plan.</i></p> <p><i>Similar to other provisions which are evaluated elsewhere, many of the Specific Local Objectives would contribute towards the overall achievement of the selected alternative scenario for the Draft Plan and associated effects. The evaluation of this selected alternative scenario for the Draft Plan is provided in Section 7 and should be referred to.</i></p> <p><i>Many of these objectives facilitate development and would therefore have the potential to result in both direct and indirect significant adverse environmental effects upon the following environmental components:</i></p> <ul style="list-style-type: none"> • Biodiversity, flora and fauna (SEOs B1 B2 B3); • Human health (SEO PHH1); • Waters (SEOs W1 W2); • Soil (SEO S1); • Flood risk management (SEOs W3 PHH1); • Sustainable mobility and associated reductions in travel related emissions (SEO C1); • Provision of appropriate water and waste management services (SEOs M1 M2 M3); • Archaeological Heritage, including RMP designations, their context and unknown archaeology (SEO CH1); • Architectural heritage, including RPS and ACA designations (SEO CH2); and • Landscape including designations and visual impacts (SEO L1). <p><i>These effects would be mitigated by both measures which have been integrated into the Draft Plan (see Section 9) and any additional requirements arising through lower tier assessments or granting of permission. Residual adverse effects would be likely to be non-significant.</i></p>				
Map 1 Clonskeagh/Dundrum				
1 To facilitate, support and enhance the development of University College Dublin including all associated and supporting facilities. A range of uses will be facilitated on Belfield campus lands to encourage and foster strong links between education, community and the business sector in the County.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
2 To implement and develop the lands in Goatstown in accordance with the Goatstown LAP.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
4 To encourage the retention and development of the Airfield Estate for educational, recreational and cultural uses.	B2 B3 PHH1 S1 W3 M1 M2 M3 C1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
6 To consider potential additional future uses of the Dublin Eastern Bypass reservation corridor, including public transport provision generally and Bus Rapid Transit services specifically, pending a decision from the National Roads Authority/Central Government in relation to the future status of the Bypass.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
80 To facilitate, support and enhance educational facilities in the County, in particular the activities of Dundrum VEC that will foster strong links between education, community and the business sector in the County.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	

92 To redevelop the former flats site at Rosemount Court as part of the Council's Housing Programme.	C1 PHH1		M3	B1 B2 B3 S1 W1 W2 W3 M1 M2 CH1 CH2 L1
134 To prepare a Local Area Plan for Dundrum.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
Map 2 Booterstown/Blackrock/Stillorgan				
1 To facilitate, support and enhance the development of University College Dublin including all associated and supporting facilities. A range of uses will be facilitated on Belfield campus lands to encourage and foster strong links between education, community and the business sector in the County.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
5 The Council will support and facilitate the development of a "Gateway" scheme at the N11 entrance to the UCD campus which will provide for a range of uses normally associated with a major international university. These facilities should encourage a greater interaction with the neighbouring community and the wider public and should include, inter alia, cultural, community and neighbourhood-scale retail facilities, swimming pool, theatre, a significant commercial office component, incubator units, hotel and student accommodation and transport facilities. The "Gateway" shall be of a high architectural standard and embody the principles of sustainability and energy efficiency. The open spaces and sylvan setting of the University campus shall be protected from development in accordance with the University College Dublin Campus Development Plan.	C1 PHH1 CH2 B2 L1 W3		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
6 To consider potential additional future uses of the Dublin Eastern Bypass reservation corridor, including public transport provision generally and Bus Rapid Transit services specifically, pending a decision from the National Roads Authority/Central Government in relation to the future status of the Bypass.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
7 To develop Blackrock Park in accordance with an approved plan.			B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
10 To implement and develop Blackrock in accordance with the Blackrock LAP.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
11 To support and enhance University College Dublin's third level education and associated facilities at Avoca Avenue/Carysfort Avenue.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
12 To implement and develop the lands at Stillorgan in accordance with the Stilorgan LAP.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
72 The line of the Eastern Bypass between the N11 and Dublin Bay is not fixed. The route will be determined following environmental assessment including appropriate assessment and a process of public consultation.				B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1
81 To facilitate, support and enhance educational facilities in the County, in particular the activities of Blackrock VEC that will foster strong links between education, community and the business sector in the County.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	

84 To protect and conserve South Dublin Bay Candidate Special Area of Conservation.	B1 B2 B3 PHH1 S1 W1 W3 L1			CH1 CH2 M1 M2 M3 C1 W2
93 To promote the development of the S2S Promenade and Cycleway as a component part of the National East Coast Trail Cycle Route. It should be noted that these coastal routes will be subject to a feasibility study, including an assessment of the route options. 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 SAC's, SPA's, and pNHA's in Dublin Bay and the surrounding area.	C1 B1 B2 B3 PHH1 S1 W1 W2 W3 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M3 CH1 CH2 L1	M1 M2
98 That public access be maintained for Community Uses at the former Blackrock Town Hall and Blackrock Library.	C1 PHH1			B1 B2 B3 S1 W1 W2 W3 M1 M2 M3 CH1 CH2 L1
131 To provide for the development of a Neighbourhood Centre in the north-east 'quadrant' of the Park, Carrickmines.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
135 To prepare a Local Area Plan for Ballyogan and Environs.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
Map 3 Monkstown/Dún Laoghaire				
13 To facilitate the continued development of the Harbour in accordance with the pending Dún Laoghaire and Environs Local Area Plan.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W3 M1 M2 M3 C1 CH1 CH2 L1	W2
14 To encourage the redevelopment of 'The Gut' adjacent to the West Pier to include improved access to the area.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W3 M3 C1 CH1 CH2 L1	W2 M1 M2
15 Coal Quay Bridge. To improve/upgrade access to Dún Laoghaire Harbour and lands adjacent to the West Pier.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W3 M3 C1 CH1 CH2 L1	W2 M1 M2
16 To retain the Carlisle Pier structure and to encourage redevelopment on it that will incorporate uses that will bring significant cultural, social, recreational and economic benefits to Dún Laoghaire-Rathdown and must provide for a high degree of public accessibility and permeability, with walkways, viewing areas and public spaces throughout. The redevelopment should integrate with the immediate built environment, should provide improved accessibility between the development and Dún Laoghaire town centre and should commemorate the unique heritage and history of the Pier as a gateway for the Irish Diaspora.	C1 CH1 CH2		B1 B2 B3 PHH1 S1 W1 W3 M1 M2 M3 C1 CH1 CH2 L1	W2
17 To manage and enhance the Metals from Marine Road to Dalkey giving due regard to its historic importance while encouraging its use as a walking and cycling route between Dún Laoghaire and Dalkey.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W2 W3 M3 C1 CH1 CH2 L1	M1 M2
21 To develop the area between East Pier and Sandycove, including the open space at Otranto Place, in accordance with an approved plan.			B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
22 Bullock Harbour: That any residential development shall form part of a mixed-use scheme which will include commercial marine-based activity and public water-based recreational uses and shall have regard to the special nature of the area in terms of the height, scale, architecture and density of built form.	C1 PHH1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
28 To implement and develop the lands in Deansgrange in accordance with the Deansgrange LAP.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	

29 To facilitate, support and enhance the development of the Dún Laoghaire Institute of Art, Design and Technology including all associated and supporting facilities. A range of uses will be facilitated on the campus lands to encourage and foster strong links between education, community and the business sector in the County.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
64 To improve pedestrian and cycle permeability to and from the former Dún Laoghaire golf course lands at Honeypark.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W2 W3 M3 CH1 CH2 L1	M1 M2
68 To seek the renewal of the obsolete area at George's Place and the Fire Station in accordance with the objectives of the Dún Laoghaire Urban Framework Plan and the pending Dún Laoghaire and Environs Local Area Plan.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
73 To retain the existing hospital uses at St. Michael's and to develop and upgrade the Hospital and Boylan Centre sites in accordance with the objectives of the Dún Laoghaire Urban Framework Plan and the pending Dún Laoghaire and Environs Local Area Plan.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
77 To prepare a Local Area Plan for Dún Laoghaire and Environs.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
83 To facilitate, support and enhance educational facilities in the County, in particular the activities of Dún Laoghaire Further College of Education (DFEI) that will foster strong links between education, community and the business sector in the County.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
84 To protect and conserve South Dublin Bay Candidate Special Area of Conservation.	B1 B2 B3 PHH1 S1 W1 W3 L1			CH1 CH2 M1 M2 M3 C1 W2
93 To promote the development of the S2S Promenade and Cycleway as a component part of the National East Coast Trail Cycle Route. It should be noted that these coastal routes will be subject to a feasibility study, including an assessment of the route options. 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 SAC's, SPA's, and pNHA's in Dublin Bay and the surrounding area.	C1 B1 B2 B3 PHH1 S1 W1 W2 W3 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M3 CH1 CH2 L1	M1 M2
95 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.	C1 B1 B2 B3 PHH1 S1 W1		B1 B2 B3 PHH1 S1 W1 W3 M3 C1 CH1 CH2 L1	W2 M1 M2
106 To improve the Streetscape/Public Realm of Monkstown Village.	C1 PHH1 B1 B2 B3 W3 W1 W2 S1 M1 M2 M3 L1 CH1 CH2		CH1 CH2	
107 That Dún Laoghaire Carnegie Library be retained for public and community use.	C1 PHH1			B1 B2 B3 S1 W1 W2 W3 M1 M2 M3 CH1 CH2 L1
128 To encourage the amalgamation of shop units to allow for the creation of medium (150-300 sq.m.) and larger shop floor plates (> 300 sq.m.), particularly in the Central Commercial Core Quarter.	C1 PHH1		CH2	B1 B2 B3 S1 W1 W2 W3 M1 M2 M3 CH1 L1
133 To protect and conserve Rockabill to Dalkey Island Candidate Special Area of Conservation.	B1 B2 B3 PHH1 S1 W1 W3 L1			CH1 CH2 M1 M2 M3 C1 W2
136 The Council will review the Dun Laoghaire Harbour Heritage Management Plan 2011, with a view to considering same for inclusion in the County Development Plan 2016 - 2022, as appropriate	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W3 M1 M2 M3 C1 CH1 CH2 L1	W2

Map 4 Sandycove/Dalkey				
21 To develop the area between East Pier and Sandycove, including the open space at Otranto Place, in accordance with an approved plan.			B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
22 Bullock Harbour: That any residential development shall form part of a mixed-use scheme which will include commercial marine-based activity and public water-based recreational uses and shall have regard to the special nature of the area in terms of the height, scale, architecture and density of built form.	C1 PHH1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
77 To prepare a Local Area Plan for Dún Laoghaire and Environs.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
78 To prepare a Management Plan for Killiney Hill, Dalkey Hill and Roches/Mullins Hill.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
93 To promote the development of the S2S Promenade and Cycleway as a component part of the National East Coast Trail Cycle Route. It should be noted that these coastal routes will be subject to a feasibility study, including an assessment of the route options. 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 SAC's, SPA's, and pNHA's in Dublin Bay and the surrounding area.	C1 B1 B2 B3 PHH1 S1 W1 W2 W3 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M3 CH1 CH2 L1	M1 M2
129 To implement the objectives of the Dalkey Island Management Plan 2013 - 2023.	B1 B2 B3 PHH1 S1 W1 W3 L1 CH1 CH2			M1 M2 M3 C1 W2
133 To protect and conserve Rockabill to Dalkey Island Candidate Special Area of Conservation.	B1 B2 B3 PHH1 S1 W1 W3 L1			CH1 CH2 M1 M2 M3 C1 W2
Map 5 Dundrum/Ballinteer				
4 To encourage the retention and development of the Airfield Estate for educational, recreational and cultural uses.	B2 B3 PHH1 S1 W3 M1 M2 M3 C1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
6 To consider potential additional future uses of the Dublin Eastern Bypass reservation corridor, including public transport provision generally and Bus Rapid Transit services specifically, pending a decision from the National Roads Authority/Central Government in relation to the future status of the Bypass.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
23 To progress the Masterplan for Marlay Demesne with a focus on the conservation of the heritage of Marlay Park, the provision of quality recreational facilities, maintaining the highest standard of horticultural and landscape presentation and increasing accessibility of the Park, Marlay House and its amenities.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
134 To prepare a Local Area Plan for Dundrum.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
Map 6 Sandyford/Foxrock				
6 To consider potential additional future uses of the Dublin Eastern Bypass reservation corridor, including public transport provision generally and Bus Rapid Transit services specifically, pending a decision from the National Roads Authority/Central Government in relation to the future status of the Bypass.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	

26 To support the status of and continued viability of Leopardstown Racecourse as one of Europe's premier racetracks and a major leisure facility in the County by encouraging its future development and facilitating the development of supporting facilities.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
28 To implement and develop the lands in Deansgrange in accordance with Deansgrange LAP.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
109 To seek the provision of a use that animates the street corners e.g. Hotel/Apart Hotel at north western end of Ballymoss Road at the junction with Blackthorn Drive.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 L1	CH2
110 To improve and/or preserve a hotel at Central Park.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 L1	CH2
111 To protect and or improve travellers accommodation adjacent to Burton Hall.			CH2 B2 S1	B1 B3 PHH1 W1 W2 W3 M1 M2 M3 C1 CH1 L1
112 To provide for primary and post primary education facilities at Legionaries of Christ lands and at Stillorgan Industrial Estate/Benildus Avenue.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 L1	CH2
113 To facilitate the provision of community infrastructure at ground floor along the eastern outer edge of the Carmanhall residential neighbourhood along Blackthorn Road, to create active street frontage and to ensure the appropriate provision of social and community infrastructure to serve the needs of the resident and employee population.	C1 PHH1		B1 B3 PHH1 S1 W1 W2 M1 M2 M3 C1	B2 CH1 CH2 L1 W3
114 To provide a Public Transport Interchange along Blackthorn Avenue.	C1 PHH1		B2 PHH1 S1 W2 W3 M3 C1 CH1 L1	B1 B3 M1 M2 CH2 W1
115 To retain and enhance the Sylvan character at South County Business Park.	CH1 CH2 B2 L1 W3			B1 B3 PHH1 S1 W1 W2 M1 M2 M3 C1
116 To facilitate the provision of, uses that will create an active street frontage and provide a transition between the residential neighbourhood and the opposing employment based areas along Blackthorn Road (where Blackthorn Road runs parallel with Carmanhall Road only). It is anticipated that these will be provided as own door units for small business.	C1 PHH1		B2 PHH1 S1 W2 W3 M3 C1 CH1 L1	B1 B3 M1 M2 CH2 W1
117 To provide for the expansion of the existing use at Burton Hall in accordance with the Institutional Lands Objective.	C1 PHH1		CH2 B2 W3 L1	B1 B3 PHH1 S1 W1 W2 M1 M2 M3 C1 CH1
119 To develop a Sandyford Business District Civic Park at the corner of Corrig Road and Carmanhall Road.	C1 PHH1 W3 B2 L1		M3	W1 W2 B1 B3 CH2 CH1 M1 M2
120 To facilitate the further development of Sandyford Business Estates in accordance with the policies and objectives of the Sandyford Urban Framework Plan.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 CH1 CH2 L1	M1 M2 M3 C1
121 To ensure the provision of pocket parks and civic spaces in accordance with locations specified on Map 1 and Drawing no.10 of the Sandyford Urban Framework Plan	B2 B3 PHH1 W3 C1 L1		M3	B1 S1 W1 W2 M1 M2 C1 CH1 CH2
123 To facilitate the attraction of internationally trading services to South County Business Park. Office Based Employment will be permitted on these lands to a similar plot ratio to that of the remainder of the South County Business Park. In preparing a Masterplan for the area regard should be given to providing activity along the route to the Luas and to the residential amenity of the local residents.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	

135 To prepare a Local Area Plan for Ballyogan and Environs.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
Map 7 Cabinteely/Killiney				
28 To implement and develop the lands in Deansgrange in accordance with Deansgrange LAP.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
29 To facilitate, support and enhance the development of the Dún Laoghaire Institute of Art, Design and Technology including all associated and supporting facilities. A range of uses will be facilitated on the campus lands to encourage and foster strong links between education, community and the business sector in the County.	C1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
30 To prepare a Local Area Plan for Sallynoggin.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
31 As part of the redevelopment of the National Rehabilitation Hospital a dedicated open space / recreational area shall be provided. The location and size of the area shall be agreed with the Planning Authority, to include details of the level of public accessibility, which will be appropriate to, and consistent with, the specialist rehabilitation services provided through the hospital. Any future redevelopment of the site shall also include the provision of a pedestrian and cycle link to connect Rochestown Avenue to Pottery Road through the subject site.	C1 PHH1		B2 B3 PHH1 S1 W1 W2 W3 M3 C1 CH1 CH2 L1	B1 M1 M2
34 To upgrade and improve Kilbogget Park in accordance with the approved Masterplan.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W2 W3 M3 C1 CH1 CH2 L1	M1 M2
46 To create a linear park along the Loughlinstown river incorporating a pedestrian route and cycleway (greenway), which will link Cabinteely Park to the sea at Rathsallagh.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W2 W3 M3 C1 CH1 CH2 L1	M1 M2
52 To implement and develop the lands at Cherrywood in accordance with the approved Strategic Development Zone Planning Scheme.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
64 To improve pedestrian and cycle permeability to and from the former Dún Laoghaire golf course lands at Honeypark.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W2 W3 M3 CH1 CH2 L1	M1 M2
78 To prepare a Management Plan for Killiney Hill, Dalkey Hill and Roches/Mullins Hill.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
93 To promote the development of the S2S Promenade and Cycleway as a component part of the National East Coast Trail Cycle Route. It should be noted that these coastal routes will be subject to a feasibility study, including an assessment of the route options. 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 SAC's, SPA's, and pNHA's in Dublin Bay and the surrounding area.	C1 B1 B2 B3 PHH1 S1 W1 W2 W3 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M3 CH1 CH2 L1	M1 M2
124 Any future development proposals contained within lands zoned objective 'E', and which immediately abut residentially-zoned land shall clearly demonstrate that the residential amenities of the neighbouring properties will be respected and protected through sensitive design with reference to height, scale and setback and will include the provision of appropriate high quality landscaping and boundary treatments. Vehicular or pedestrian access through Oakdale Drive to lands zoned objective 'E' will not be permitted and this road will remain as a cul-de-sac. Consideration should be given to the use of the 'Former Workmans Club' for staff recreational facilities.	PHH1 C1 L1			B1 B2 B3 S1 W1 W2 W3 M1 M2 M3 CH1 CH2

125 That a green buffer zone will be provided on the inside of the new boundary along Pottery Road on lands zoned 'E' and 'MH'. This green buffer zone will be extensively landscaped with trees and shrubs and will be 5 metres wide opposite 'E' zoned lands and 9 metres wide opposite 'A' zoned lands.	B2 S1 L1			B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 CH1 CH2
130 To limit development along the Brennanstown Road to minor domestic infills and extensions until a Traffic Management Scheme for the area has been undertaken.	PHH1 C1			B1 B2 B3 S1 W1 W2 W3 M1 M2 M3 CH1 CH2 L1
132 To encourage the redevelopment and refurbishment of the former Killiney Tea Rooms.	CH2			B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1
Map 8 Kilmashogue/Ticknock				
36 To preserve trees, woodlands and amenity gardens at Fernhill.	B2 B3 PHH1 S1 W1 W2 W3 CH2 L1			B1 CH1 C1 M1 M2 M3
49 To protect and conserve the Wicklow Mountains National Park Candidate Special Area of Conservation.	B1 B2 B3 PHH1 S1 W1 W2 L1			M1 M2 M3 C1 CH1 CH2 W3
Map 9 Stepside				
36 To preserve trees, woodlands and amenity gardens at Fernhill.	B2 B3 PHH1 S1 W1 W2 W3 CH2 L1			B1 CH1 C1 M1 M2 M3
37 To provide a multi-purpose Community/Sports/Recreation Facility ("Samuel Beckett Civic Campus") to include a regional library, swimming pool plus other community/sports facilities on Council Lands at Ballyogan Road.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
38 To complete the comprehensive remediation of the former Ballyogan Landfill and to prepare a Masterplan for the proposed Jamestown Park to provide recreation lands in association with the developing areas of Stepside and Kiltiernan. These lands will be gradually developed on an incremental basis.	B1 B2 B3 PHH1 S1 W1 W2 W3 M3 C1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
39 To continue to develop the existing sports facilities at the site known as the "8-acre field" that will incorporate a new pavilion for golf, indoor hall and changing rooms in association with tennis courts and a bowling green.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
40 To implement and develop the lands at Kiltiernan/Glenamuck in accordance with the Kiltiernan/Glenamuck Local Area Plan.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
52 To implement and develop the lands at Cherrywood in accordance with the approved Strategic Development Zone Planning Scheme.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
65 To seek the development of a multi-purpose, multi-functional community centre south of Enniskerry Road proximate to the Stepside Village Neighbourhood Centre.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
70 To ensure the provision of a combined pedestrian footpath/cycleway connection between Belarmine and Kilgobbin Road to improve overall local permeability and to facilitate direct access from new residential communities to the Luas Line B1 public transport corridor.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	

130 To limit development along the Brennanstown Road to minor domestic infills and extensions until a Traffic Management Scheme for the area has been undertaken.	PHH1 C1			B1 B2 B3 S1 W1 W2 W3 M1 M2 M3 CH1 CH2 L1
135 To prepare a Local Area Plan for Ballyogan and Environs.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
Map 10 Laughanstown/Shankill				
34 To upgrade and improve Kilbogget Park in accordance with the approved Masterplan.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W2 W3 M3 C1 CH1 CH2 L1	M1 M2
43 To retain the famine grave on the site adjacent to St. Columcille's Hospital.	CH1 CH2 B2			B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1
45 To conserve the Bride's Glen as a public amenity.	B1 B2 B3 PHH1 S1 W1 W2 W3 CH1 CH2 L1			M1 M2 M3 C1
46 To create a linear park along the Loughlinstown river incorporating a pedestrian route and cycleway (greenway), which will link Cabinteely Park to the sea at Rathsallagh.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W2 W3 M3 C1 CH1 CH2 L1	M1 M2
52 To implement and develop the lands at Cherrywood in accordance with the approved Strategic Development Zone Planning Scheme.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
54 To implement and develop the lands at Woodbrook and Shanganagh in accordance with the Woodbrook/Shanganagh Local Area Plan.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
71 That no insensitive or large scale development will take place above the 90-metre contour line at Rathmichael, from Old Connaught Golf Course to Pucks Castle Lane – Maps 10-14. Any proposal for development, other than development directly related to agriculture, forestry, recreation or the promotion of other bona fide rural enterprise or employment activity, shall be domestic in scale, appearance and function.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1			
93 To promote the development of the S2S Promenade and Cycleway as a component part of the National East Coast Trail Cycle Route. It should be noted that these coastal routes will be subject to a feasibility study, including an assessment of the route options. 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 SAC's, SPA's, and pNHA's in Dublin Bay and the surrounding area.	C1 B1 B2 B3 PHH1 S1 W1 W2 W3 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M3 CH1 CH2 L1	M1 M2
126 To refuse planning permission for any new developments which include on-site wastewater treatment facilities within this catchment, until the groundwater issues in the area are resolved or ameliorated.	B1 B2 B3 PHH1 S1 W1 W2 M1 M2			C1 W3 M3 CH1 CH2 L1
Map 11 and Insets Glendoo/Boranaraltry				
35 Through the Council's membership of the Dublin Mountains Partnership (DMP), to improve the recreation potential of the public lands in the Dublin Mountains, including the provision of a Dublin Mountains Interpretive Centre.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
49 To protect and conserve the Wicklow Mountains National Park Candidate Special Area of Conservation.	B1 B2 B3 PHH1 S1 W1 W2 L1			M1 M2 M3 C1 CH1 CH2 W3

Map 12 Glendoo/Boranaraltry				
49 To protect and conserve the Wicklow Mountains National Park Candidate Special Area of Conservation.	B1 B2 B3 PHH1 S1 W1 W2 L1			M1 M2 M3 C1 CH1 CH2 W3
50 To develop the Glencullen area in accordance with the policies and objectives of the adopted Local Area Plan.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
Map 13 Glencullen/Ballycorus				
40 To implement and develop the Kiltiernan/Glenamuck area in accordance with the adopted Local Area Plan.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
50 To develop the Glencullen area in accordance with the policies and objectives of the adopted Local Area Plan.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
51 To protect and conserve the Knocksink Wood Candidate Special Area of Conservation.	B1 B2 B3 PHH1 S1 W1 W2 L1			M1 M2 M3 C1 CH1 CH2 W3
79 To investigate and consider the feasibility of designing and implementing a Management Plan for Carrickgollogan Hill area, to the north of Murphy's Lane and including the Lead Mine complex.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
85 To protect and conserve Ballyman Glen Candidate Special Area of Conservation.	B1 B2 B3 PHH1 S1 W1 W2 L1			M1 M2 M3 C1 CH1 CH2 W3
137 The Council will assist the Dublin Mountains Partnership to facilitate enhancements to the public right of way between Scalp Villa, Enniskerry Road and Ballybetagh Road, as part of the Dublin Mountains Way	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
Map 14 Rathmichael/Old Connaught				
54 To implement and develop the Woodbrook and Shanganagh area in accordance with the Woodbrook/ Shanganagh Local Area Plan.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
56 To upgrade the Wilford Interchange in order to provide connectivity to lands west of the M11 and Old Conna Village.			B1 B3 B2 PHH1 S1 W1 W2 W3 M3 C1 CH1 CH2 L1	M1 M2
59 To prepare a Local Area Plan for Old Conna.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
61 To undertake a study into the feasibility of establishing a crematorium at Shanganagh Cemetery.				B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1
63 To co-operate with the National Transport Authority, the Railway Procurement Agency and Wicklow County Council in the establishment of a combined road/Luas bridge across the County Brook Valley to provide connections between the proposed new development areas of Old Conna and Fassaroe (Wicklow).	PHH1 C1		B1 B2 B3 S1 W1 W2 W3 M1 M2 M3 CH1 CH2 L1	

66 Allies River Road: to provide access from east to west of the M11 and vice a versa.	PHH1 C1		B2 B3 PHH1 S1 W1 W2 W3 M3 CH1 CH2 L1	B1 M1 M2
71 That no insensitive or large scale development will take place above the 90-metre contour line at Rathmichael, from Old Connaught Golf Course to Pucks Castle Lane – Maps 10-14. Any proposal for development, other than development directly related to agriculture, forestry, recreation or the promotion of other bona fide rural enterprise or employment activity, shall be domestic in scale, appearance and function.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1			
76 To continue the development of Shanganagh Park in accordance with the Masterplan, and to develop a sports facility and improved recreational facilities in the park.	B1 B2 B3 PHH1 S1 W1 W2 W3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
79 To investigate and consider the feasibility of designing and implementing a Management Plan for Carrickgollogan Hill area, to the north of Murphy's Lane and including the Lead Mine complex.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
82 To upgrade and enhance the linear park at Woodbrook Glen/Corke Abbey.	B2 B3 PHH1 S1 W1 W2 W3 C1		B1 B2 B3 PHH1 S1 W1 W2 W3 M3 C1 CH1 CH2 L1	M1 M2
85 To protect and conserve Ballyman Glen Candidate Special Area of Conservation.	B1 B2 B3 PHH1 S1 W1 W2 L1			M1 M2 M3 C1 CH1 CH2 W3
93 To promote the development of the S2S Promenade and Cycleway as a component part of the National East Coast Trail Cycle Route. It should be noted that these coastal routes will be subject to a feasibility study, including an assessment of the route options. 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 SAC's, SPA's, and pNHA's in Dublin Bay and the surrounding area.	C1 B1 B2 B3 PHH1 S1 W1 W2 W3 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M3 CH1 CH2 L1	M1 M2
105 To investigate, in consultation with the Department of Education and Science, the reservation of a single site for a Post-Primary School to serve the growth nodes of Woodbrook/Old Connaught areas. Note: The locations of SLO symbol 105 on Map 14 are notional only and not a geographic identification of specific sites.	PHH1 C1		B1 B2 B3 S1 W1 W2 W3 M1 M2 M3 CH1 CH2 L1	
126 To refuse planning permission for any new developments which include on-site wastewater treatment facilities within this catchment, until the groundwater issues in the area are resolved or ameliorated.	B1 B2 B3 PHH1 S1 W1 W2 M1 M2			C1 W3 M3 CH1 CH2 L1
127 To provide a Dart Station at Woodbrook.	C1 PHH1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	

Section 9 Mitigation Measures

9.1 Introduction

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

Various environmental sensitivities and issues have been communicated to the Council through the SEA, Appropriate Assessment (AA) and Strategic Flood Risk Assessment (SFRA) processes. By integrating all related recommendations into the Plan, the Council have ensured that both the beneficial environmental effects of implementing the Plan have been and will be maximised and that potential adverse effects have been and will be avoided, reduced or offset.

- Background work in relation to the Enterprise and Employment Strategy
- Background work in relation to the Physical Infrastructure Strategy
- Background work in relation to the Built Heritage Strategy
- Background work in relation to the Community Strategy
- Housing Strategy
- Ecological Network
- Review of Wind Energy Strategy
- Review of Landscape Character Areas
- Green Infrastructure Strategy
- Review of DLUFP
- Review of SUFP
- Climate Change proofing of existing Dún Laoghaire-Rathdown County Development Plan 2010 -2016

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

Far in advance of both the submission of the pre-Draft Plan to the Elected Members for approval and the placing of the Draft Plan (and associated SEA, AA and SFRA documents) on public display, Dún Laoghaire-Rathdown County Council undertook various works in order to inform the preparation of the Draft Plan.

The findings of this strategic work have been integrated into the Draft Plan and will be implemented when it is adopted, contributing towards both environmental protection and management and sustainable development within the County.

Strategic work done by the Council includes the preparation of the following:

- Background work in relation to the Sustainable Communities Strategy

The undertaking of this SEA process as well as the undertaking of the AA and SFRA were part of this strategic work and contributed towards the integration of environmental considerations into individual Plan provisions as detailed under Section 9.3 below.

9.3 Integration of Individual SEA, AA and SFRA Provisions into the Plan

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

Table 9.1 links these key mitigation measure(s) to the likely significant effects of implementing the Plan, if unmitigated. The integration of these measures into the Draft Plan occurred over a number of iterations and was informed by, inter alia, various communications through the SEA, AA and SFRA processes. The recommendations were often considered simultaneously and were integrated by the Plan-preparation team across a number of provisions.

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.

Table 9.1 Integration of Environmental Considerations into the Draft Plan

Potentially Significant Effect, if unmitigated	Environmental considerations that have integrated into the Draft Plan
<p>Loss of biodiversity with regard to Natura 2000 Sites and Annexed habitats and species</p> <p>& Loss of biodiversity with regard to designated sites including Wildlife Sites and listed species</p>	<p>Policy LHB16: Protection of Natural Heritage and the Environment* Policy LHB17: Habitats Directive* Policy LHB19: Designated Sites* Policy LHB24: Geological Sites Development Management 8.2.2 (v) Appropriate Assessment Development Management 8.2.9.4 Appropriate Assessment Development Management 8.2.7.1 Biodiversity Policy LHB13: National Park* Appropriate Assessment & Coastal Cycling Infrastructure Objective Policy EI1: Water Supply & Appropriate Assessment Policy EI2: Wastewater Treatment & Appropriate Assessment* Policy E13: Surface Water Drainage & Appropriate Assessment* Policy E14: Groundwater Protection & Appropriate Assessment</p>
<p>Loss of biodiversity with regard to ecological connectivity, stepping stones and non-designated biodiversity</p>	<p>Policy LHB20: Non-Designated Areas of Biodiversity Importance* Policy LHB 21: County-Wide Ecological Network* Policy LHB22 Rivers and Waterways* Policy LHB23: Hedgerows* Policy LHB26: Invasive Species</p>
<p>Spatially concentrated deterioration in human health</p>	<p>Policy CC10: Radon Gas Policy EI25: Major Accidents Policy EI20: Air and Noise Pollution Also see measures related to soil, water quality, flooding, waste water treatment and drinking water supply and quality.</p>
<p>Damage to the hydrogeological and ecological function of the soil resource</p>	<p>Development Management 8.2.9.7 New Developments–Environmental Impacts Also see measures related to water quality and waste water treatment.</p>
<p>Adverse impacts upon the status and quality of water bodies</p>	<p>Policy EI22: Water Pollution Policy EI23: Rathmichael Ground and Surface Water Protection Policy E13: Surface Water Drainage & Appropriate Assessment* Policy E14: Groundwater Protection & Appropriate Assessment Policy EI6: Integrated Water Management Plans* Policy EI7: Water Quality Management Plans Policy EI8: Sustainable Drainage Systems* Policy EI10: Storm Overflows of Sewage to Watercourses* Policy LHB9: Beaches Also see measures related to water quality and waste water treatment.</p>
<p>Increase in the risk of flooding</p>	<p>Policy CC13: Catchment Flood Risk and Management (CFRAM)*. Policy CC14: Flood Risk Management*. Policy CC15: Coastal Defence*. Policy EI8: Sustainable Drainage Systems* Policy EI9: Stormwater Impact Assessments* Policy LHB22 Rivers and Waterways*</p>
<p>Failure to provide adequate and appropriate waste water treatment & Failure to comply with drinking water regulations and serve new development with adequate drinking water that is both wholesome and clean</p>	<p>Policy EI5: Water Supply and Wastewater* Policy EI11: Water Services Investment Programme* Development Management 8.2.9.3 Environmental Impact Assessment</p>
<p>Failure to contribute towards sustainable transport and associated impacts (including emissions)</p>	<p>See Sustainable Communities Strategy in Section 2 of the Plan. Also: Policy CC1: National Climate Change Adaptation Framework.* Policy CC2: Development of National Climate Change Policy and Legislation.* Policy CC3: Development of National Energy Policy and Legislation.* Policy CC4: Sustainable Energy Action Plan* Policy CC5: Limiting Emissions of Greenhouse Gases.*</p>
<p>Increases in waste levels</p>	<p>Policy EI12: Waste Management Strategy* Policy EI13: Waste Plans Policy EI14: Private Waste Companies Policy EI15: Waste Prevention and Reduction* Policy EI16: Waste Re-use and Re-cycling* Policy EI17: Refuse Disposal* Policy EI18: Hazardous Waste Policy EI19: Rehabilitation of the Former Ballyogan Landfill</p>

Effects on entries to the Record of Monuments and Places and other archaeological heritage	<p>Policy AH1: Protection of Archaeological Heritage Policy AH2: Protection of Archaeological Material in Situ Policy AH3: Protection of Historic Towns Policy AH4: Carrickmines Castle Site Policy AH5: Historic Burial Grounds Policy AH6: Underwater Archaeology</p>
Effects on entries to the Records of Protected Structures, Architectural Conservation Areas and other architectural heritage	<p>Policy AR1: Record of Protected Structures Policy AR2: Protected Structures Applications and Documentation Policy AR3: Protected Structures and Building Regulations Policy AR4: National Inventory of Architectural Heritage (NIAH) Policy AR5: Buildings of Heritage Interest Policy AR6: Protection of Buildings in Council Ownership Policy AR7: Energy Efficiency of Protected Structures Policy AR8: Nineteenth and Twentieth Century Buildings, Estates and Features Policy AR9: Protection of Historic Street Furniture Policy AR10: Protection of Coastline Heritage Policy AR11: Industrial Heritage Policy AR12: Architectural Conservation Areas Policy AR13: Demolition within an ACA Policy AR14: Shopfronts within an ACA Policy AR15: Public Realm and Public Utility works within an ACA Policy AR16: Candidate Architectural Conservation Areas (cACA) Policy AR17: Development within a cACA</p>
Occurrence of adverse visual impacts	<p>Policy LHB1: Preservation of Landscape Character Areas* Policy LHB2: Seascape Policy LHB3: High Amenity Zones* Policy LHB4: Historic Landscape Character Areas Policy LHB5: Views and Prospects Policy LHB6: Coastal Zone Management and Dublin Bay* Policy EI21: Light Pollution</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 Draft Plan.

Monitoring can enable, at an early stage, the identification of unforeseen adverse effects and the undertaking of appropriate remedial action.

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.

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.

The Monitoring Programme may be updated to deal with specific environmental issues - including unforeseen effects - as they arise. Such issues may be identified by the Council or identified to the Council by other agencies.

10.3 Sources

Measurements for indicators generally come from existing monitoring sources. Existing monitoring sources include those maintained by the Council and the relevant authorities e.g. the Environmental Protection Agency, the National Parks and Wildlife Service and the Central Statistics Office.

Internal monitoring of the environmental effects of grants of permission in the Council will provide monitoring of various indicators

and targets on a *grant of permission*⁵⁹ basis. Where significant effects - including positive, negative, cumulative and indirect - have the potential to occur upon, for example, entries to the RMP, entries to the RPS or ecological networks as a result of the undertaking of individual projects or multiple individual projects such instances should be identified and recorded and should feed into the monitoring evaluation.

10.4 Reporting

A stand-alone Monitoring Report on the significant environmental effects of implementing the Plan will be prepared in advance of the beginning of the review of the Plan. This report should address the indicators set out below. The Council is responsible for the ongoing review of indicators and targets, collating existing relevant monitored data, the preparation of monitoring evaluation report(s), the publication of these reports and, if necessary, the carrying out of corrective action.

10.5 Thresholds

Thresholds at which corrective action will be considered include:

- The occurrence of flood events;
- Court cases taken by the Department of Arts, Heritage and the Gaeltacht regarding impacts upon archaeological heritage including entries to the RMP;
- Complaints received from statutory consultees regarding avoidable environmental impacts resulting from development which is granted permission under the Plan;
- Boil notices on drinking water; and
- Fish kills.

⁵⁹ The likely significant effects of development proposals on environmental sensitivities are further determined during the development management process. By documenting this determination (e.g. whether a proposed development will impact upon a Protected Structure or whether a proposed development can be adequately served with water services) while granting permissions, or at a later date, the requirement to monitor the effects of implementing the Plan can be achieved.

Table 10.1 Selected Indicators, Targets and Monitoring Sources

Environmental Component	Selected Indicator(s)	Selected Target(s)	Source (Frequency)
Biodiversity, Flora and Fauna	B1: Conservation status of habitats and species as assessed under Article 17 of the Habitats Directive	B1: Maintenance of favourable conservation status for all habitats and species protected under National and International legislation to be unaffected by implementation of the Plan ⁶⁰	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Department of Arts, Heritage and the Gaeltacht 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 Arts, Heritage and the Gaeltacht's National Monitoring Report for the Birds Directive under Article 12 (every 3 years). Consultations with the NPWS (at monitoring evaluation - see Section 10.4).
	B2: Percentage loss of functional connectivity without remediation resulting from development provided for by the Plan	B2: No significant ecological networks or parts thereof which provide functional connectivity to be lost without remediation resulting from development provided for by the Plan	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). CORINE mapping resurvey (every c. 5 years). Review of Council Ecological Network Mapping
	B3i: Number of significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites resulting from development provided for by the Plan B3ii: Number of significant impacts on the protection of listed species	B3i: Avoid significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites resulting from development provided for by the Plan B3ii: No significant impacts on the protection of listed species	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Consultations with the NPWS (at monitoring evaluation - see Section 10.4).
Population and Human Health	PHH1: Occurrence (any) of a spatially concentrated deterioration in human health arising from environmental factors resulting from development provided for by the Plan, as identified by the Health Service Executive and Environmental Protection Agency	PHH1: 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 EPA and Health Service Executive (at monitoring evaluation - see Section 10.4).
Soil	S1: Soil extent and hydraulic connectivity	S1: To minimise reductions in soil extent and hydraulic connectivity	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).

⁶⁰ Except as provided for in Section 6(4) of the Habitats Directive, viz. There must be:

- no alternative solution available;
- imperative reasons of overriding public interest for the plan to proceed; and
- adequate compensatory measures in place.

Environmental Component	Selected Indicator(s)	Selected Target(s)	Source (Frequency)
Water	W1i: Classification of Overall Status (comprised of ecological and chemical status) under the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (SI No. 272 of 2009) W1ii: Mandatory and Guide values as set by the EU Bathing Water Directive and transposing Bathing Water Quality Regulations (SI No. 79 of 2008)	W1i: Not to cause deterioration in the status of any surface water or affect the ability of any surface water to achieve 'good status' ⁶¹ by 2015 W1ii: To achieve - as a minimum - Mandatory values and, where possible, to achieve Guide values as set by the EU Bathing Water Directive and transposing Bathing Water Quality Regulations (SI No. 79 of 2008)	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Data issued under the Water Framework Directive Monitoring Programme for Ireland (multi-annual). EPA <i>The Quality of Bathing Water in Ireland</i> reports.
	W2: Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC	W2: Not to affect the ability of groundwaters to comply with Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Data issued under the Water Framework Directive Monitoring Programme for Ireland (multi-annual).
	W3: Number of incompatible developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk	W3: Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk in compliance with <i>The Planning System and Flood Risk Management Guidelines for Planning Authorities</i>	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).
Material Assets	M1: Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the Plan	M1: All new developments granted permission to be connected to and adequately and appropriately served by waste water treatment over the lifetime of the Plan	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).
	M2: Number of non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health as a result of implementing the Plan	M2: No non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health as a result of implementing the Plan	<ul style="list-style-type: none"> EPA The Provision and Quality of Drinking Water in Ireland reports (multi-annual). EPA Remedial Action List (every quarter).
	M3i: Total collected and brought household waste M3ii: Packaging recovered (t) by self-complying packagers	M3i: Minimise increases in and, where possible, reduce household waste generation M3ii: Maximise increases in packaging recovered (t) by self-complying packagers	<ul style="list-style-type: none"> EPA National Waste Reports EPA Ireland's Environment Reports
Air and Climatic Factors	C1: Percentage of population travelling to work, school or college by public transport or non-mechanical means	C1: An increase in the percentage of the population travelling to work, school or college by public transport or non-mechanical means	<ul style="list-style-type: none"> CSO Population Data (every c. 5 years).

⁶¹ Good status as defined by the WFD equates to approximately the following in the current national schemes of classification as set out by the EPA:

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

Environmental Component	Selected Indicator(s)	Selected Target(s)	Source (Frequency)
Cultural Heritage	CH1: Percentage of entries to the Record of Monuments and Places - including Zones of Archaeological Potential (and the context of the above within the surrounding landscape where relevant) - protected from significant adverse effects arising from new development granted permission under the Plan	CH1: Protect entries to the Record of Monuments and Places - including Zones of Archaeological Potential (and their context of the above within the surrounding landscape where relevant) from significant adverse effects arising from new development granted permission under the Plan	<ul style="list-style-type: none"> • Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). • Consultation with Department of Arts, Heritage and the Gaeltacht (at monitoring evaluation - see Section 10.4).
	CH2: Percentage of entries to the Record of Protected Structures and Architectural Conservation Areas and their context protected from significant adverse effects arising from new development granted permission under the Plan	CH2: Protect entries to the Record of Protected Structures and Architectural Conservation Areas and their context from significant adverse effects arising from new development granted permission under the Plan	<ul style="list-style-type: none"> • Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). • Consultation with Department of Arts, Heritage and the Gaeltacht (at monitoring evaluation - see Section 10.4).
Landscape	L1: Implementation of Plan Policies LHB1 to LHB5 which provide for the protection and management of Landscape Character Areas, the Seascape, High Amenity Zones, Historic Landscape Character Areas and Views and Prospects	L1: To implement Plan Policies LHB1 to LHB5 which provide for the protection and management of Landscape Character Areas, the Seascape, High Amenity Zones, Historic Landscape Character Areas and Views and Prospects	<ul style="list-style-type: none"> • Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).

Section 11 SEA Summary Table

Below is a summary table outlining how likely significant effects (if unmitigated) are linked to relevant mitigation measure(s) - which have been integrated into the Draft Plan - and indicator(s) which will be used for monitoring.

Table 11.1 SEA Summary Table: Likely Significant Effects, Mitigation Measures and Indicators for Monitoring

Likely Significant Effect, if unmitigated	Mitigation Measure Reference(s) from the Draft Plan	Primary Indicator(s) for Monitoring
Loss of biodiversity with regard to Natura 2000 Sites and Annexed habitats and species & Loss of biodiversity with regard to designated sites including Wildlife Sites and listed species	Policy LHB16: Protection of Natural Heritage and the Environment* Policy LHB17: Habitats Directive* Policy LHB19: Designated Sites* Policy LHB24: Geological Sites Development Management 8.2.2 (v) Appropriate Assessment Development Management 8.2.9.4 Appropriate Assessment Development Management 8.2.7.1 Biodiversity Policy LHB13: National Park* Appropriate Assessment & Coastal Cycling Infrastructure Objective Policy E11: Water Supply & Appropriate Assessment Policy E12: Wastewater Treatment & Appropriate Assessment* Policy E13: Surface Water Drainage & Appropriate Assessment* Policy E14: Groundwater Protection & Appropriate Assessment	B1: Conservation status of habitats and species as assessed under Article 17 of the Habitats Directive B3i: Number of significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites resulting from development provided for by the Plan B3ii: Number of significant impacts on the protection of listed species
Loss of biodiversity with regard to ecological connectivity and stepping stones	Policy LHB20: Non-Designated Areas of Biodiversity Importance* Policy LHB 21: County-Wide Ecological Network* Policy LHB22 Rivers and Waterways* Policy LHB23: Hedgerows* Policy LHB26: Invasive Species	B2: Percentage loss of functional connectivity without remediation resulting from development provided for by the Plan
Spatially concentrated deterioration in human health	Radon Gas Policy CC11 Policy E125: Major Accidents Policy E120: Air and Noise Pollution Also see measures related to soil, water quality, flooding, waste water treatment and drinking water supply and quality.	PHH1: Occurrence (any) of a spatially concentrated deterioration in human health arising from environmental factors resulting from development provided for by the Plan, as identified by the Health Service Executive and Environmental Protection Agency
Damage to the hydrogeological and ecological function of the soil resource	Development Management 8.2.9.7 New Developments—Environmental Impacts Also see measures related to water quality and waste water treatment.	S1: Soil extent and hydraulic connectivity

Likely Significant Effect, if unmitigated	Mitigation Measure Reference(s) from the Draft Plan	Primary Indicator(s) for Monitoring
Adverse impacts upon the status and quality of water bodies, including bathing waters	Policy E122: Water Pollution Policy E123: Rathmichael Ground and Surface Water Protection Policy E13: Surface Water Drainage & Appropriate Assessment* Policy E14: Groundwater Protection & Appropriate Assessment Policy E16: Integrated Water Management Plans* Policy E17: Water Quality Management Plans Policy E18: Sustainable Drainage Systems* Policy E110: Storm Overflows of Sewage to Watercourses* Policy LHB9: Beaches Also see measures related to water quality and waste water treatment.	W1i: Classification of Overall Status (comprised of ecological and chemical status) under the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (SI No. 272 of 2009) W1ii: Mandatory and Guide values as set by the EU Bathing Water Directive and transposing Bathing Water Quality Regulations (SI No. 79 of 2008) W2: Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC
Increase in the risk of flooding	Policy CC13: Catchment Flood Risk and Management (CFRAM)*. Policy CC14: Flood Risk Management*. Policy CC15: Coastal Defence*. Policy E18: Sustainable Drainage Systems* Policy E19: Stormwater Impact Assessments* Policy LHB22 Rivers and Waterways*	W3: Number of incompatible developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk
Failure to provide adequate and appropriate waste water treatment & Failure to comply with drinking water regulations and serve new development with adequate drinking water that is both wholesome and clean	Policy E15: Water Supply and Wastewater* Policy E111: Water Services Investment Programme* Development Management 8.2.9.3 Environmental Impact Assessment	M1: Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the Plan M2: Number of non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health as a result of implementing the Plan
Failure to contribute towards sustainable transport and associated impacts	See Sustainable Communities Strategy in Section 2 of the Plan. Also: Policy CC1: National Climate Change Adaptation Framework.* Policy CC2: Development of National Climate Change Policy and Legislation.* Policy CC3: Development of National Energy Policy and Legislation.* Policy CC4: Sustainable Energy Action Plan* Policy CC5: Limiting Emissions of Greenhouse Gases.*	C1: Percentage of population travelling to work, school or college by public transport or non-mechanical means
Increases in waste levels	Policy E112: Waste Management Strategy* Policy E113: Waste Plans Policy E114: Private Waste Companies Policy E115: Waste Prevention and Reduction* Policy E116: Waste Re-use and Recycling* Policy E117: Refuse Disposal* Policy E118: Hazardous Waste Policy E119: Rehabilitation of the Former Ballyogan Landfill	M3i: Total collected and brought household waste M3ii: Packaging recovered (t) by self-complying packagers

Likely Significant Effect, if unmitigated	Mitigation Measure Reference(s) from the Draft Plan	Primary Indicator(s) for Monitoring
Effects on entries to the Record of Monuments and Places and other archaeological heritage	Policy AH1: Protection of Archaeological Heritage Policy AH2: Protection of Archaeological Material in Situ Policy AH3: Protection of Historic Towns Policy AH4: Carrickmines Castle Site Policy AH5: Historic Burial Grounds Policy AH6: Underwater Archaeology	CH1: Percentage of entries to the Record of Monuments and Places - including Zones of Archaeological Potential (and the context of the above within the surrounding landscape where relevant) - protected from significant adverse effects arising from new development granted permission under the Plan
Effects on entries to the Records of Protected Structures, Architectural Conservation Areas and other architectural heritage	Policy AR1: Record of Protected Structures Policy AR2: Protected Structures Applications and Documentation Policy AR3: Protected Structures and Building Regulations Policy AR4: National Inventory of Architectural Heritage (NIAH) Policy AR5: Buildings of Heritage Interest Policy AR6: Protection of Buildings in Council Ownership Policy AR7: Energy Efficiency of Protected Structures Policy AR8: Nineteenth and Twentieth Century Buildings, Estates and Features Policy AR9: Protection of Historic Street Furniture Policy AR10: Protection of Coastline Heritage Policy AR11: Industrial Heritage Policy AR12: Architectural Conservation Areas Policy AR13: Demolition within an ACA Policy AR14: Shopfronts within an ACA Policy AR15: Public Realm and Public Utility works within an ACA Policy AR16: Candidate Architectural Conservation Areas (cACA) Policy AR17: Development within a cACA	CH2: Percentage of entries to the Record of Protected Structures and Architectural Conservation Areas and their context protected from significant adverse effects arising from new development granted permission under the Plan
Occurrence of adverse visual impacts	Policy LHB1: Preservation of Landscape Character Areas* Policy LHB2: Seascape Policy LHB3: High Amenity Zones* Policy LHB4: Historic Landscape Character Areas Policy LHB5: Views and Prospects Policy LHB6: Coastal Zone Management and Dublin Bay* Policy EI21: Light Pollution	L1: Implementation of Plan Policies LHB1 to LHB5 which provide for the protection and management of Landscape Character Areas, the Seascape, High Amenity Zones, Historic Landscape Character Areas and Views and Prospects



